



**CALL NO. 202**

**CONTRACT ID. 211016**

**FLEMING - CARTER COUNTIES**

**FED/STATE PROJECT NUMBER 121GR21D016-STP BRO**

**DESCRIPTION ELIZAVILLE ROAD(KY-32)**

**WORK TYPE GRADE, DRAIN & SURFACE WITH BRIDGE**

**PRIMARY COMPLETION DATE 4/30/2022**

**LETTING DATE: April 23,2021**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 am EASTERN DAYLIGHT TIME April 23,2021. Bids will be publicly announced at 10:00 am EASTERN DAYLIGHT TIME.

**PLANS AVAILABLE FOR THIS PROJECT.**

**DBE CERTIFICATION REQUIRED - 5%**

**REQUIRED BID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

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# **PART I**

## **SCOPE OF WORK**

ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 211016  
121GR21D016-STP BRO  
COUNTY - CARTER  
PCN - BR02200011900  
STP BRZ 9030 (263)

KY 1 (MP 6.850) ADDRESS DEFICIENCIES OF KY 1 BRIDGE OVER POWELL BRANCH 022B00006N. (MP 6.970), A DISTANCE OF 0.12 MILES.CULVERT REPLACEMENT SYP NO. 09-10002.00.  
GEOGRAPHIC COORDINATES LATITUDE 38:16:51.00 LONGITUDE 82:55:13.00

COUNTY - FLEMING  
PCN - DE03500322116  
STP BRO 5215 (011)

ELIZAVILLE ROAD(KY-32) (MP 7.760) ADDRESS DEFICIENCIES OF BRIDGE ON KY-32 OVER MUD LICK CREEK 0.2 MILES WEST OF CRAINTOWN ROAD(CR-1302) (MP 7.800), A DISTANCE OF 0.29 MILES.GRADE, DRAIN & SURFACE WITH BRIDGE SYP NO. 09-01084.00.  
GEOGRAPHIC COORDINATES LATITUDE 38:25:17.00 LONGITUDE 83:48:18.00

COMPLETION DATE(S):	
COMPLETED BY 11/15/2021	MILESTONE DATE FOR CULVERTS
COMPLETED BY 04/30/2022	APPLIES TO ENTIRE CONTRACT



## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

### **BID SUBMITTAL**

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website ([www.bidx.com](http://www.bidx.com)) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

### **JOINT VENTURE BIDDING**

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

### **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

**For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.**

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

### **SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT**

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to [kytc.projectquestions@ky.gov](mailto:kytc.projectquestions@ky.gov). The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website ([www.transportation.ky.gov/contract](http://www.transportation.ky.gov/contract)). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

### **HARDWOOD REMOVAL RESTRICTIONS**

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

### **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

### **FEDERAL CONTRACT NOTES**

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

- |                                |  |
|--------------------------------|--|
| 102.02 Current Rating          | 102.08 Preparation and Delivery of Proposals |
| 102.13 Irregular Bid Proposals | 102.14 Disqualification of Bidders           |
| 102.09 Proposal Guaranty       |  |

### **CIVIL RIGHTS ACT OF 1964**

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

### **NOTICE TO ALL BIDDERS**

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

### **SECOND TIER SUBCONTRACTS**

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

It is the policy of the Kentucky Transportation Cabinet (“the Cabinet”) that Disadvantaged Business Enterprises (“DBE”) shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

### **DBE GOAL**

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

### **OBLIGATION OF CONTRACTORS**

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

### **CERTIFICATION OF CONTRACT GOAL**

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

“The bidder certifies that it has secured participation by Disadvantaged Business Enterprises (“DBE”) in the amount of \_\_\_\_\_ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program.”

**The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.**

### **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **5** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
2. Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Proposal Line Number, Category Number, and the Project Line Number can be found in the “material listing” on the Construction Procurement website under the specific letting;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows;
  - a. If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
    - The entire expenditure paid to a DBE manufacturer;
    - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
    - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- 4. Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- 5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

#### **UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED**

Contractors must submit the signed subcontract between the contractor and the DBE contractor, along with the DBE's certificate of insurance. If the DBE is a supplier of materials for the project, a signed purchase order must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

#### **CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS**

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set (hard copy along with an electronic copy) of this information must be received in the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

1. Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
2. Whether the bidder provided solicitations through all reasonable and available means;
3. Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
4. Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the Disadvantaged Enterprise Business Liaison Officer (DEBLO) in the Office of Civil Rights and Small Business Development to give notification of the bidder's inability to get DBE quotes;
5. Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
6. Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
7. Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
8. Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
9. Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
10. Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal; and
11. Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.



### **FAILURE TO MEET GOOD FAITH REQUIREMENT**

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

### **SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT**

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry out the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

### **PROMPT PAYMENT**

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

### **CONTRACTOR REPORTING**

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a **signed and notarized** Affidavit of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

#### **\*\*\*\*\* IMPORTANT \*\*\*\*\***

**Please mail the original, signed and completed TC (18-7) Affidavit of Subcontractor Payment form and all copies of checks for payments listed above to the following address:**

Office of Civil Rights and Small Business Development  
6<sup>th</sup> Floor West 200 Mero Street  
Frankfort, KY 40622

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact in this office is Mr. Melvin Byne. Mr. Byne's current contact information is email address – [melvin.bynes2@ky.gov](mailto:melvin.bynes2@ky.gov) and the telephone number is (502) 564-3601.

### **DEFAULT OR DECERTIFICATION OF THE DBE**

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

### **PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES**

In accordance with the FY 2019 National Defense Authorization Act (NDAA), 2 CFR 200.216, and 2 CFR 200.471, Federal agencies are prohibited, after August 13, 2020, from obligating or expending financial assistance to obtain certain telecommunications and video surveillance services and equipment from specific producers. As a result of these regulations, contractors and subcontractors are prohibited, on projects with federal funding participation, from providing telecommunication or video surveillance equipment, services, or systems produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities)

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).**

**(REV 12-17-15) (1-16)**

SECTION 7 is expanded by the following new Article:

102.10 **Cargo Preference Act – Use of United States-flag vessels.**

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

### **ASPHALT MIXTURE**

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

### **DGA BASE FOR SHOULDERS**

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

### **INCIDENTAL SURFACING**

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

### **OPTION A**

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.

## **SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS**

09-10002.00 Carter 022B00006N

### **I. TRAFFIC CONTROL GENERAL**

Except as provided herein, traffic shall be maintained in accordance with the current standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to section 106.01, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

### **II. TRAFFIC COORDINATOR**

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. The traffic coordinator shall report all incidents throughout the work zone to the engineer on the project. The contractor shall furnish the name and telephone number where the traffic coordinator can be contacted at all times.

### **III. SIGNS**

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to “Maintain and Control Traffic”

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures.

Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500’, 1000’, and 500’ in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

#### **IV. TEMPORARY PAVEMENT STRIPING**

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor’s means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6” black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

#### **V. PROJECT PHASING & CONSTRUCTION PROCEDURES**

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to “Maintain and Control Traffic”.

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

## **VI. PAVEMENT DROP-OFF**

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

Greater than four inches - positive separation or wedge with 3:1 or flatter slope needed. If there is five feet or more distance between the edge of the pavement and the drop-off, then drums, panel, or barricades may be used. If the drop-off is greater than 12 inches, positive separation is strongly encouraged. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations.

For temporary conditions, drop-offs greater than four inches may be protected with plastic drums, vertical panels or barricades for short distances during daylight hours while work is being done in the drop-off area.

## **VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS**

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

## **VIII. BARRICADES**

For projects which allow full closure, ensure a minimum of (4) type III barricades are used at each end of the bridge for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

## **VIII. DETOUR AND ON SITE DIVERSIONS**

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer 7

days prior to the pre-construction meeting. The proposed detour route shall meet the following requirements:

- 1)ÁDetour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2)ÁThe contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3)ÁIt may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4)ÁFor projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

## **IX. PAYMENT**

Unless listed as a bid item in the contract documents, payment will only be made for the following items:

- 1.ÁPortable Changeable Message Boards - Each
- 2.ÁMaintain and Control Traffic - Lump Sum

All other items needed to maintain traffic in accordance with these contract documents and the approved traffic control plan shall be considered incidental to Maintain and Control Traffic. These items include but are not limited to traffic signals, signs, barrier wall, crash cushions, temporary guardrail, temporary and permanent pavement striping, cones, barrels, flaggers, etc.



## Special Note for Construction Phasing

09-10002 - CARTER COUNTY - 022B00006N

### Phase I

- Construct all temporary traffic control devices in accordance with the current edition of the KYTC spec book, standard drawings and MUTCD.
- Maintain two lanes of traffic on existing KY 1 and KY 773.
- Construct the double 60" pipes for the temporary diversion.
- Construct Phase I of the proposed 9'x5' RCBC.
- Maintain all existing drainage patterns.
- Construct the Phase II temporary diversion up to the limits of existing roadways (KY 1 and KY 773).
- Provide at least 2 weeks notification via variable message signs as directed by engineer prior to implementation of four way stop of Phase II traffic pattern.

### Phase II

- Shift traffic to the temporary diversion.
- Provide two-weeks' notice to KY DEP/ERT (Rodney Maze – [rodney.maze@ky.gov](mailto:rodney.maze@ky.gov) – 606-782-0246) and the KYTC Project Engineer prior to shifting traffic to the temporary diversion.
- Traffic will use temporary diversion while contaminated soil is excavated by others (under the direction of KY DEP/ERT) in the Phase III construction area.
- Contractor will not perform construction activities in the Phase III construction area until the KYTC Project Engineer and Rodney Maze, KY DEP/ERT confirm that contaminated soil removal work has been completed by others.
- If the contaminated soil excavation by others is not complete within 30 calendar days from the shifting of traffic to the temporary diversion, then a time extension by change order will be negotiated between the contractor and KYTC.

### Phase III

- Install temporary barrier with crash cushions between culvert and Parcel 3.
- Once given clearance by KYTC that contaminated soil excavation work has been completed, construction of the remainder of the proposed 9'x5' RCBC should commence.

### Phase IV

- Remove the temporary diversion, temporary pipes, barriers and traffic control devices.
- Complete final surfacing and permanent signing and striping operations.
- Milestone project completion date November 15, 2021.

SPECIAL NOTE FOR BRIDGING KENTUCKY PROJECT STENCIL

09-10002.00   Carter   022B00006N

This Special Note will apply to the bridge or bridges in this proposal. Section references herein are to the Department’s Current Standard Specifications for Road and Bridge Construction.

**1.0      DESCRIPTION.** This specification covers an additional concrete stencil for structures in the Bridging Kentucky Program.

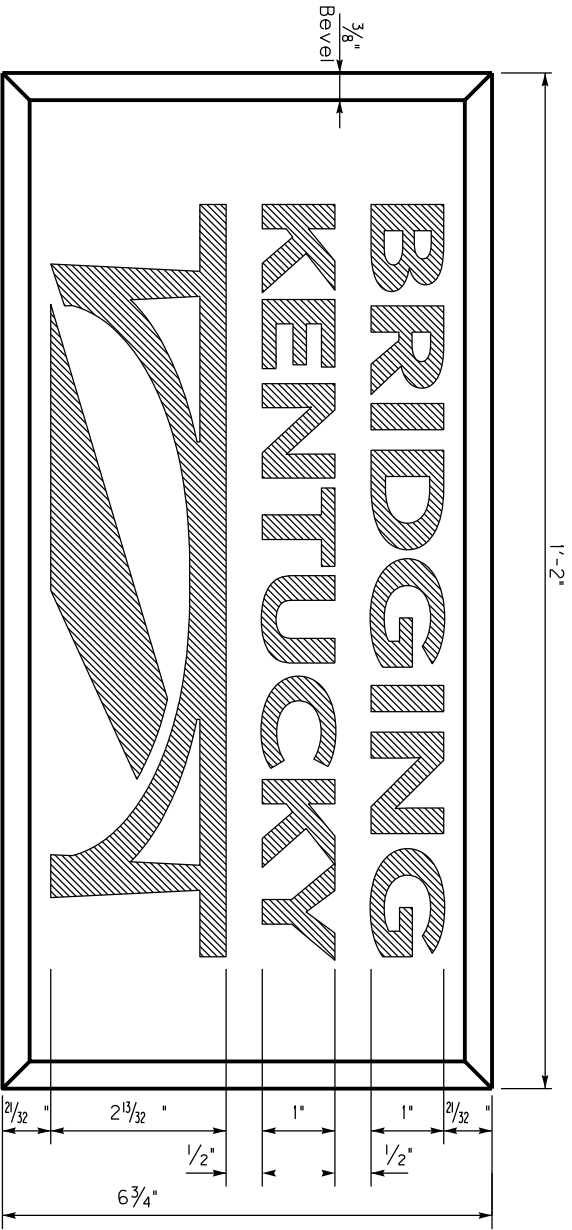
**2.0      CONSTRUCTION.**

**2.1 Construction Date and Identification.** On all concrete bridges and box culverts, stencil the year the Contract was executed, the structure drawing number on the concrete at the locations designated, and the Bridging Kentucky Logo as depicted in the drawing in this special note. Make the figures on the stencil according to details specified in the drawing. For bridges having a clear span of 20 feet or more, stencil the year the Contract was executed and load capacity of the structure on the outside face of the plinth or barrier wall as shown on the drawing. On all box culverts, place stenciled figures giving the year in which the Contract is executed on the inlet end of the culvert on the outside face and center of the parapet or headwall. Do not use permanent plates or markers of any kind, other than those shown, on any structure. On all bridges, imprint the name of the prime contractor in the concrete at the location shown. Furnish stencils, all equipment, tools, labor, materials, and other incidentals necessary.

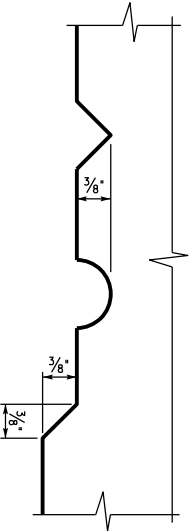
**3.0      MEASUREMENT.** The Department will not measure bridge stencils for payment per section 601 of the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge and Construction, latest edition.

**4.0      PAYMENT.** The Department will not make payment for bridge stencils, materials, and associated work. All work, materials, and associated costs shall be incidental to the item listed:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
08100, 08102-08106, 02555	Concrete, Class	Cubic Yard



STENCIL FOR BRIDGING KENTUCKY LOGO

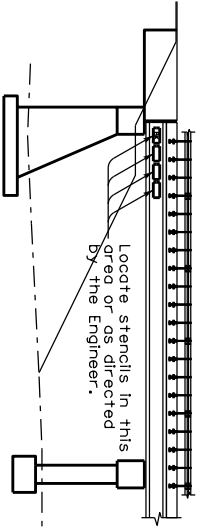


### GENERAL NOTES

STENCILS: For concrete applications, fabricate all stencils from recessed panels with beveled edges with raised letters and figures in accordance with Subsection 601.03.19 of the Specifications. For steel girders, point stencil using flat block point and the recommended dimensions. When using point, borders shown in the above detail are to be excluded.

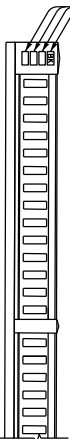
BRIDGING KENTUCKY LOGO STENCIL: Place on all program bridges when applicable. In proximity to other stencils required.

### LOCATION OF STENCILS ON BRIDGES



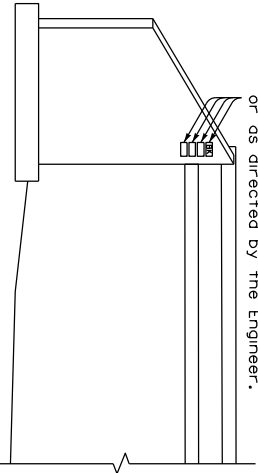
APPLICATION ON STEEL GIRDERS

Locate stencils in this area or as directed by the Engineer.



APPLICATION ON CLASSIC RAIL

Locate stencils in this area or as directed by the Engineer.



APPLICATION ON WING WALLS

KENTUCKY DEPARTMENT OF HIGHWAYS
STENCIL FOR BRIDGING KENTUCKY LOGO
BRIDGING KENTUCKY <small>Reinforced Concrete Bridge</small>

1'-2"

3/8" Bevel

2012

KYHL-93

3/8" Bevel

7/8"

3"

6 3/4"

1 1/2"

1 1/2"

7/8"

STENCIL FOR YEAR AND DESIGN LOADING

When year only is used place year in center of plate

1'-2"

3/8" Bevel

25664

3/8" Bevel

1 7/8"

3"

6 3/4"

1 7/8"

STENCIL FOR DRAWING NUMBER

CONTRACTOR NAME

CONTRACTOR STENCIL

Location of Stencils

Location of Stencils in this area or as directed by the Engineer.

ELEVATION A-A

Single Culvert

Location of Stencil

Stream Flow

Inlet End\*

PLAN

Location of Stencils on all Culverts (Single or Multiple) and Arches

ELEVATION A-A

Multiple span Culvert

LOCATION OF STENCILS ON BRIDGES

TYPE OF LETTERS

\* Use the outlet end for outlet only extensions

STENCILS

FOR STRUCTURES

KENTUCKY

DEPARTMENT OF HIGHWAYS

STANDARD DRAWING NO. BCX-006-10

SUBMITTED *Mark Holt* 12-01-15

DIRECTOR *David* STRUCTURAL DESIGN

APPROVED *David* 12-01-15

STATE HIGHWAY ENGINEER

DATE

GENERAL NOTES

STENCILS: Fabricate all stencils from recessed panels with beveled edges with raised letters and figures in accordance with Subsection 601.03.19 of the Specifications.

YEAR AND DESIGN LOADING STENCIL: Show the year that the contract is executed and the design load as shown on the contract plans. The design load is required on all structures classified as bridges by Subsection 101.03 of the Specifications and on other structures as referenced on plans.

DRAWING NUMBER STENCIL: Use this stencil on all structures. The number to be placed on the stencil shall be taken from the contract plans.

CONTRACTOR STENCIL: Place on all bridges, the name of the prime contractor and subcontractor(s), when applicable, in proximity to other stencils required.

## SPECIAL NOTE FOR FOUNDATION PREPARATION

09-10002.00 Carter County 022B00006N

**Foundation Preparation.** For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, geotextile fabric Class 1, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

Backfill material used behind newly constructed abutments on county routes may be constructed with Type III soil backfill. All existing abutments, abutments on state routes, and newly constructed or existing bents must be backfilled with material meeting Structural Granular Backfill specifications.

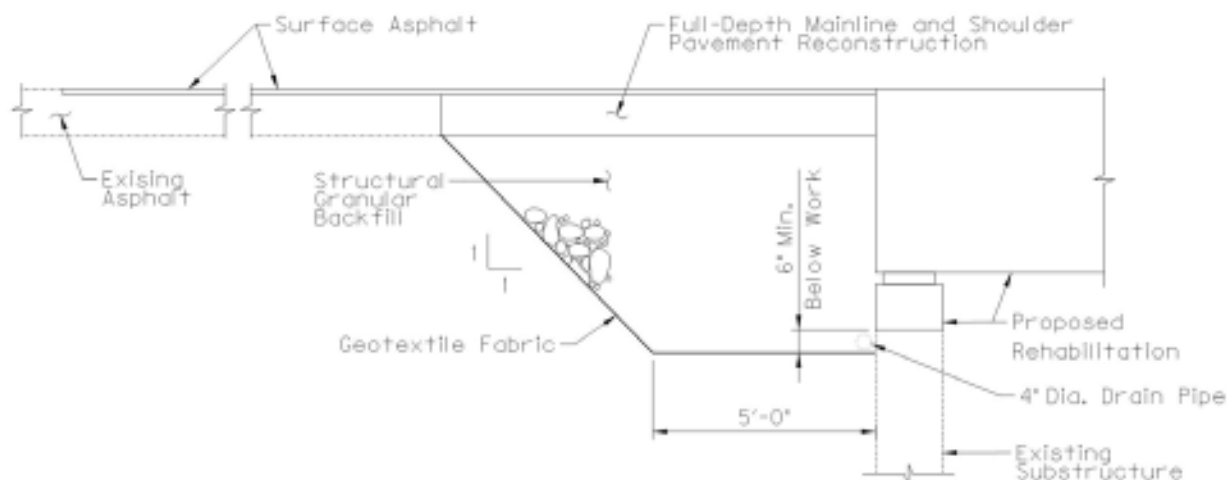


Figure 1: Detail showing proposed work for deck and superstructure replacements

### I. MEASUREMENT

A. Foundation Preparation: See Section 603.

### II. PAYMENT

A. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill or Type III soil backfill to be incidental to Foundation Preparation.

### **SPECIAL NOTE FOR WASTE MANAGEMENT**

09-10002.00 Carter 022B00006N

Petroleum contaminated soils and groundwater have been identified at the subject site. The Contractor will coordinate excavation of petroleum contaminated soils associated with the active underground storage tank system with Kentucky Department for Environmental Protection, Division of Waste Management, Underground Storage Tank Branch personnel (KDEP-UST). KDEP-UST will be responsible for excavation, transportation, and disposal of contaminated soils. The extent of contaminated soils has not been determined and limits of the excavation will be made at the time of construction by KDEP-UST personnel.

Additional reimbursement of backfill materials will be based on scale tickets of excavated soils. Waste soils not disposed of by KDEP-UST will be stockpile on-site for contractors use.

Contractor to allow access to KDEP-UST personnel to the site as necessary. Contractor to coordinate site activities with the following:

KDEP-UST  
Rodney Maze  
525 Hecks Plaza Drive  
Morehead, KY  
606-783-8655  
[rodney.maze@ky.gov](mailto:rodney.maze@ky.gov)

Shield Environmental Associates, Inc.  
Charles Phillips, PG  
948 Floyd Drive  
Lexington, KY  
85-294-5155  
[charles\\_phillips@shieldmw.com](mailto:charles_phillips@shieldmw.com)

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Environmental Compliance Plan (ECP)

9-10002



Special Note for  
Environmental Compliance Plan (ECP)

Project:	A4 D9 022B00006N Carter	Item No:	9-10002
Process Document:	-1	Bridge No	022B00006N
Current Workflow Step:	ENV Updates	County:	Carter
Subject:	ECP- 022B00006N	Status	Submitted

The following ECP checklist outlines responsibilities of the Contractor and/or the KYTC to ensure all environmental commitments are met. Please pay special attention to:

- Commitment Description (commitment made to resource agencies)
- Responsible Party
- Compliance Document (how compliance is to be documented)

If you have any question please email [BKY\\_Env@doc.e-builder.net](mailto:BKY_Env@doc.e-builder.net).



**Environmental Compliance Plan (ECP)****9-10002**

#	Subject	Commitment Description	ENV Reference Document and Oversight Agency	Responsibility Phase	Responsible Party	Compliance Document	Doc to Include in Bid Pkg and Contract	Bid Pkg / Contract Doc Attached?
1	Air Quality	Notify DAQ 10 days prior to demolition	Asbestos Inspection Report - USEPA and KDAQ	Construction	Contractor	DEP 7036 Form and email to KDAQ	Asbestos Inspection Report	Yes
2	Archaeology	Stop work if unanticipated discoveries, including human remains, are discovered	Archaeology Report - Kentucky SHPO	Construction	Contractor	See instruction in Special Note	Special Note for Additional Environmental Commitments	Yes
3	Environmentally Cleared Area (ECA)	Keep all work activity within the cleared area. Contractor shall install snow fencing to delineate ECA	Archaeology Report - Kentucky SHPO	Construction	Contractor, Inspector	Daily Work Report (DWR)	Special Note for Additional Environmental Commitments	Yes
4	Species	Do not clear trees during June or July	Biological Assessment - USFWS	Construction	Contractor	Daily Work Report (DWR)	Special Note for Seasonal Restrictions	Yes
5	Water Quality	Install and maintain erosion control	NW3 - USACE	Construction	Contractor	Daily Work Report (DWR)	Special note for Sedimentation and Erosion Prevention	Yes
6	Water Quality	Follow conditions in NW3	NW3 - USACE	Construction	Contractor	See instructions in NW3	NW3	Yes

**Environmental Compliance Plan (ECP)**

**9-10002**

#	Subject	Commitment Description	ENV Reference Document and Oversight Agency	Responsibility Phase	Responsible Party	Compliance Document	Doc to Include in Bid Pkg and Contract	Bid Pckg / Contract Doc Attached?
7	Water Quality	If 1.0 acre or more of land is disturbed in total (including staging areas) must obtain KPDES permit	KYR10 (BMP) - USEPA KDOW	Construction	Contractor	See instructions in KPDES	KYR10 (BMP)	Yes
8	Historic	Do not disturb any land within the school property other than that acquired by the temporary easement. The school property is not to be used for staging.	SHPO Historic approval letter.	Construction	Inspector, KYTC Resident Engineer, Contractor	Daily Work Report (DWR)	CAP note with May 8, 2019 letter from The KY SHPO and map.	Yes

**Environmental Compliance Plan (ECP)**

**9-10002**

#	Subject	Commitment Description	ENV Reference Document and Oversight Agency	Responsibility Phase	Responsible Party	Compliance Document	Doc to Include in Bid Pkg and Contract	Bid Pkg / Contract Doc Attached?
9	Hazmat	Contaminated soil must be removed during construction. Kentucky Department of Environmental Protection UST Branch as agreed to remove the soil. However, this must happen during construction, once the soil is exposed.	KDEP UST Branch	Construction	KYTC DEA, KYTC Resident Engineer, Contractor	Closure report from KDEP.	Special Note regarding Contaminated Soils	Yes
10	Other	Project/Site dependent	NEPA - FHWA	Environmental	KYTC DEA	n/a	CE	Yes

## SPECIAL NOTE

### FOR SEDIMENT PREVENTION AND EROSION CONTROL

09-10002.00 Carter 022B00006N

#### FOR IMPACT REGARDLESS OF SIZE OF THE DISTURBED AREA

Potential impacts to gray bat foraging habitat and habitat for federally listed fish and mussel species will be minimized by implementing erosion prevention and sediment control measures.

As required under Section 213 of the KYTC Standard Specifications, prior to onsite activities a **site-specific Erosion Control Plan including BMPs** to ensure continuous erosion control throughout the construction and post construction period. The plan will identify individual Disturbed Drainage Areas (DDA) where storm water from the construction area will be discharged off site or into waters of the Commonwealth.

Should the Contractor fail to create a BMP Plan or provide and maintain the necessary erosion control, Liquidated Damages will apply at the rate specified in the contract. If no rate is specified, Liquidated Damages will be applied at the rate specified in Section 108 of the Standard Specifications.

The erosion prevention and sediment controls proposed are presented below.

- The location of the individual erosion prevention/sediment control measures will be identified by the Resident Engineer and Contractor. The Contractor will place erosion control devices as identified in the site-specific BMP Plan prior to beginning work.
- Mulch will be placed, during grade and drain activities, across all areas where no work will be conducted for a period of 14 consecutive days.
- Tree clearing within the riparian zone will be minimized. Trees to be removed will be determined by the resident engineer and the contractor prior to disturbance. (Note: Any "Special Note for Tree Clearing Restrictions" must be adhered to.)
- Silt fence, or other approved method as appropriate, will be installed at the edge of waters within the project corridors to eliminate the deposition of rock and debris in the streams during construction activities. In the unforeseen event that unintended debris does enter the streams, the resident engineer will halt the contributing activity until appropriate remedial actions have been implemented.
- To the maximum extent plausible, construction activities will take place during low-flow periods.
- Equipment staging and cleaning areas will be located to eliminate direct inputs to waters of the Commonwealth. These areas will be located such that effluent will be filtered through vegetated areas and appropriate sediment controls prior to discharge offsite.

- Concrete will be poured in a manner to avoid spills into the streams. In the unforeseen event that a spill does occur, the USFWS will be notified, and the resident engineer will immediately halt the activity until remedial measures have been implemented.
- KYTC proposes to stabilize areas disturbed during construction activities through vegetation establishment and placement of riprap and geotextile fabric. Re-vegetation of the disturbed areas will allow thermoregulation of water within the streams, establish long-term, regenerative stabilization of the stream banks, and provide nutrients to the aquatic macroinvertebrate community through inputs of organic material.
- Areas disturbed during construction and not stabilized with rip rap and erosion blanket will be seeded using a standard seed mix. Depending on project slope and project location, application rates and seed mix types will vary. The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of KYTC Standard Specifications.
- Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 221 of KYTC Standard Specifications. The Engineer's inspections shall be performed a minimum of once per month and within seven (7) days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the Contractor unless improvements to the BMPs are required. The Contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within five (5) days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance. If corrections are not made within the five (5) days specified, the liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.
- Contrary to Sections 212.05 and 213.05, unless listed in the proposal, bid items for temporary BMPs and items for permanent erosion control will not be measured for payment and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.
- The Contractor shall be responsible for applying "good engineering practices." The Contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the current Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

#### FOR IMPACT GREATER THAN 1.0 ACRE

When the total disturbed area for a project, including laydown and waste/borrow areas, is greater than 1.0 acre, the Contractor shall be responsible for filing the Kentucky Pollution discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW). The Contractor will be responsible for following the KPDES requirements of local Municipal Separate Storm Sewer System (MS4) programs with jurisdiction. Required NOI shall name the Contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference. For grouped contracts with more than one structure, each structure will be treated independently in regards to disturbed area unless another structure is within 0.25 mile of

the structure. For structures within 0.25 mile of each other, the total disturbed area will be the sum of the combined disturbed areas. The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 Program that has jurisdiction. The NOT shall be filed after the Engineer agrees the project is stabilized or the project has been formally accepted.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP Plan documents as construction progresses, and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009, or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of the KYTC current Department of Highways, Standard Specifications for Road and Bridge Construction (Standard Specifications).

The Contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control. The Contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

**If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone (502) 564-7250.**

## SPECIAL NOTE

### For Additional Environmental Commitments

09-10002.00 Carter 022B00006N

IN ADDITION TO OTHER ENVIRONMENTAL COMMITMENTS LISTED IN THIS CONTRACT, THE FOLLOWING COMMITMENTS ALSO APPLY, AS THIS IS A FEDERALLY FUNDED UNDERTAKING AS DEFINED IN SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, [36 CFR 800.16\(Z\)](#):

- 1) The KYTC has completed a Phase 1 archaeological survey for a site-specific area surrounding the bridge. The cleared area is shown as “Archaeologically Cleared Area” or “Environmentally Cleared Area” on the concept plans and/or the map attached to this note or included elsewhere in the proposal. Likewise, any areas that must be avoided have been labeled “Do Not Disturb.” The contractor shall install snow fencing to clearly delineate the boundary of the project lying within the bounds of the archeologically cleared area and right of way/easements. This snow fence shall be paid for per linear foot measured. If the Contractor requests additional area, and as a result additional delineation is required, the additional snow fence will not be paid and will be considered incidental to the original line item for snow fence.

If the Contractor deems it necessary to use additional areas outside the Archaeologically/ Environmentally Cleared Area for any purposes—e.g., laydown yards, vehicle parking, parking cranes, delivering beams, borrow areas, waste areas, etc.—the Contractor must first get a written agreement with the landowner (assuming the additional area is outside the right-of-way). Then the Contractor shall seek approval of the use of the site—whether within or outside the right-of-way—by both the KYTC Section Supervisor and the Bridging Kentucky Environmental Lead at [BKY\\_Env@docs.e-builder.net](mailto:BKY_Env@docs.e-builder.net). The Contractor shall provide a map of the area(s) to be used, including access points, and property-owner agreements. The BKY Environmental Team will complete initial field investigations for archaeological, historical, ecological, and other environmental clearances. If any potentially significant site or resources are found, the KYTC has the right to deny the use of the proposed site. The maps and property owner agreements are to be submitted at least ten (10) business days prior to the Preconstruction Conference, or sixty (60) days prior to the Contractors access to the site, for coordination and review by the KYTC District and Bridging Kentucky Team.

A Liquidated Damage of \$50,000 will be assessed whenever the Contractor has used any restricted areas. The fee will be assessed on a *per bridge* basis, whether the contract involves bridge bundles or a single bridge. In addition, all fines, fees, penalties, remediation costs, and other damages related to breaches of Threatened and Endangered Species Act Section 7, National Historic Preservation Act Section 106, Clean Water Act Sections 401 and 404, Kentucky General Permit for Stormwater Discharges KYR10, Environmental Protection Agency requirements, State Historic Preservation Office requirements, and other related permitting agencies will be paid by the Contractor, including all associated costs and burdens placed upon the Kentucky Transportation Cabinet.

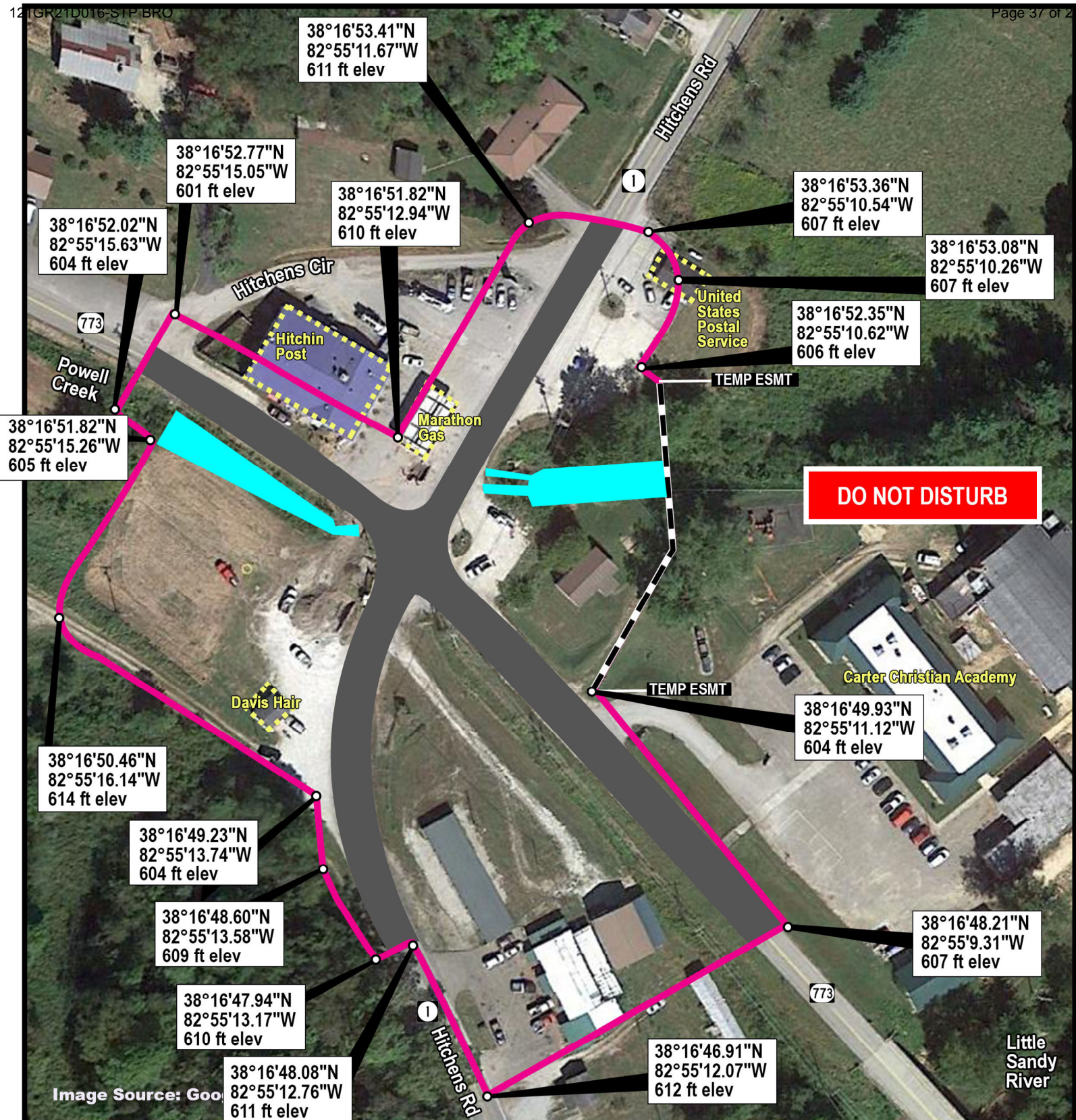
- 2) In the event that human remains are encountered during project activities, all work should be immediately stopped in the area. The area should be cordoned off, and, in accordance with KRS

72.020, the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to Nicolas Laracuenta at the Kentucky Heritage Council at (502) 892-3614, George Crothers at the Office of State Archaeology at (859) 257-1944, and KYTC DEA archaeologists at (502) 564-7250.

For guidance regarding inadvertent discovery and treatment of human remains, refer to the KYTC's [Right of Way Guidance Manual](#) (Section ROW-1202), and the Advisory Council on Historic Preservation's (ACHP) [Policy Statement Regarding Treatment of Human Remains and Grave Goods](#) (adopted by ACHP February 23, 2007).

- 3) If, during the implementation of The Project, a previously unidentified historic/ archaeological property is discovered or a previously identified historic/archaeological property is affected in an unanticipated manner, the contractor shall (1) call KYTC DEA archaeologists at (502) 564-7250, (2) call SHPO archaeologists at (502) 892-3614, and (3) ensure that all work within a reasonable area of the discovery shall cease until such time as a treatment plan can be developed and implemented.





Environmentally Cleared Area (ECA)

Hitchens Rd x KY 773

Structures within ECA

Temporary Easement

Powell Creek

ID: 022B00006N  
Item No.: 9-10002



NOTE: Latitude, Longitude and Elevation are approximate based on Google Earth





## Project Information

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### A. Site Description

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## B. Sediment and Erosion Control Measures

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### C. Other Control Measures

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## ➤ ÁFertilizersÁ

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## F. Inspections

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## G. Non-Storm Water Discharges

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## H. Groundwater Protection Plan

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KyTC BMP Plan for Project CID ## - ####

Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

Signed \_\_\_\_\_, \_\_\_\_\_

Typed or printed name<sup>2</sup>TitleSignature

(3) Signed \_\_\_\_\_, \_\_\_\_\_

Typed or printed name<sup>1</sup>TitleSignature

1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.
2. KYTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

KyTC BMP Plan for Project CID ## - ####

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor Name:

Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed \_\_\_\_\_, \_\_\_\_\_

Typed or printed name<sup>1</sup>TitleSignature

1. Sub-Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

**SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND  
LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS  
09-10002.00 – CARTER COUNTY – 022B00006N**

**I. COMPLETION DATE.**

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the milestone project completion date. At a minimum, traffic is to be placed in its final configuration running on both lifts of asphalt base with appropriate striping by November 15, 2021. Prior to reopening the road to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications.

**II. LIQUIDATED DAMAGES.**

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Maintenance of the diversion must be completed within 24 hours for items that do not adversely affect traffic. In the event of a washout, and access is no longer maintained, the contractor has 4 hours to reopen the roadway to traffic. Failure to meet either the 24 hour requirement or the 4 hour requirement will result in Liquidated Damages being charged at a rate of \$750 per hour beyond the required time specified, once notified. Re-grading of the diversion will be incidental to maintain and control traffic, however additional material if deemed necessary by the Engineer will be paid as specified in the contract.



**SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND  
LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS  
09-1084.00 – FLEMING COUNTY – 035B00038N**

**I. COMPLETION DATE.**

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the primary project completion date. The Contractor is allotted 90 calendar days once the construction of the diversion begins until work has been completed enough to safely place traffic back in its final alignment on a minimum of both lifts of asphalt base and with appropriate striping by November 15, 2021. The 90-calendar day period will also include the removal of diversion and placement of all erosion control measures. The Engineer will begin charging calendar days for this work regardless of the holidays or seasonal weather limitations. The sanitary sewer relocation work will not count against the 90 calendar days. At a minimum, traffic is to be placed in its final configuration running on both lifts of asphalt base with appropriate striping by November 15, 2021. Prior to reopening the road to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the road to traffic unless prior approval is obtained from the engineer for use of temporary railing.

**II. LIQUIDATED DAMAGES.**

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Maintenance of the diversion must be completed within 24 hours for items that do not adversely affect traffic. In the event of a washout, and access is no longer maintained, the contractor has 4 hours to reopen the roadway to traffic. Failure to meet either the 24 hour requirement or the 4 hour requirement will result in Liquidated Damages being charged at a rate of \$750 per hour beyond the required time specified, once notified. Re-grading of the

diversion will be incidental to maintain and control traffic, however additional material if deemed necessary by the Engineer will be paid as specified in the contract.

## ***SPECIAL NOTE***

### **For Tree Removal**

**Fleming County**  
**ADDRESS DEFICIENCIES OF BRIDGE ON KY 32 OVER**  
**MUD LICK CREEK 0.2 MILES W OF CRAINTOWN RD**  
**Item No. 9-1084**

NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST  
HEIGHT) FROM JUNE 1- JULY 31.

**If there are any questions regarding this note, please contact Danny Peake, Director,  
Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone:  
(502) 564-7250.**

***SPECIAL NOTE***

**Tree Clearing Restriction**

**Carter County**

**Item No. 9-10002.00**

**Bridge No. 022B00006N**

DUE TO THE RECOVEREY PLAN FOR ENDANGERED BATS, NO TREE  
CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

**If there are any questions regarding this note, please contact Danny Peake,  
Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY  
40601, Phone: (502) 564-7250.**

### **SPECIAL NOTE FOR CONCRETE SLURRY**

If diamond grinding, grooving or any other process which produces slurry is required on roadways or bridges, the contractor shall ensure that all concrete slurry associated with these processes is collected, managed, and disposed of appropriately. The waste material shall be disposed of at a permitted disposal facility, in accordance with the Kentucky Standard Specifications for Road and Bridge Construction and the Environmental Performance Standards outlined in 401 KAR 47:030, or managed as a material for beneficial reuse. Any fines or remediation related to improper disposal shall be the sole responsibility of the contractor.

Disposal of concrete slurry will not be paid separately and shall be considered incidental to other bid items.

8/20/2019

### **Special Note for Bridge Demolition, Renovation and Asbestos Abatement**

If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 working days prior to commencement of any bridge demolition or renovation work.

Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.

## ***SPECIAL NOTE***

### **KY Division of Air Quality Bridge Demolition Notification**

#### **Fleming County**

**Address deficiencies of bridge on KY 32 over Mud Lick Creek  
0.2 miles W of Craintown Road (CR 1302) 035B00038N  
Item No. 9-1084.00**

**Please be advised that it will be the responsibility of the selected roadway contractor to submit the 10-Day Notice of Intent for Demolition to the Kentucky Division of Air Quality. The attached Asbestos Inspection Report should accompany the submittal.**

**If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, TCOB, 200 Mero Street, Frankfort, KY 40622, Phone: (502) 564-7250.**



Matthew G. Bevin  
Governor

**COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

Greg Thomas  
Secretary

**MEMORANDUM**

TO: Karen Mynhier, Environmental Coordinator  
District 9 – Fleming County  
FROM: Brittany Stratton, Geologist II  
UST/Hazmat Section  
DATE: 08/10/2017  
SUBJECT: Asbestos Inspection Report for Fleming County  
Replace Bridge on KY32 over Mudlick Creek  
Bridge # 035B00038N  
Item # 09-1084

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**This report is prepared to accompany the 10-day NOI for Demolition to the Division of Air Quality.**  
**Please include all pages with submittal**

**Project and Structure Information**

County: Fleming

Bridge # 035B00038N

Description: Bridge inspected for asbestos containing materials (ACM's)

**Results**

No suspect materials detected

**Conclusions**

No abatement is required.



An Equal Opportunity Employer M/F/D



**Brittany Stratton**

*Has met the requirements of 401 KAR 58.005 and is accredited as an:*

**Asbestos  
Inspector**

Accreditation Number: **117-06-6049**

Issue Date: **6/20/2017**

Expiration Date: **6/13/2018**



## Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: January 18, 2019

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #I18-06-9270

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### Project and Structure Identification

Project: Carter County: Item No. 9-10002

Structure ID: #022B00006N

Structure Location: Ky-1 Over Powell Branch, Carter County, Kentucky

Sample Description: No suspect asbestos containing (ACM) were observed

Inspection Date: January 17, 2019

### Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.

No suspect asbestos containing (ACM) were observed.

**Commonwealth of Kentucky**  
**Department for Environmental Protection**  
**Division for Air Quality**

**Russell Henry Brooks**

*Has met the requirements of 401 KAR 58.005 and is accredited as an:*

**Asbestos  
Inspector**

**Accreditation Number: 118-06-9270**

**Issue Date: 6/12/2018**

**Expiration Date: 6/5/2019**

# NOTIFICATION OF ASBESTOS ABATEMENT/DEMOLITION/RENOVATION

(Instructions for completing form on back)

\*\*\*\*File this form with Regional Office where project will be performed\*\*\*\*

Kentucky Division for Air Quality  
300 Sower Boulevard, 2<sup>nd</sup> Floor  
Frankfort, KY 40601

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PAGE 1 OF  
INITIAL SUBMITTAL DATE  
REVISION DATE  
NOTIFICATION # -

-----OFFICE USE ONLY-----

ID #

LOG #

**Description** of planned renovation/demolition, including abatement methods & demo/reno methods.

Contractor

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Contact Person \_\_\_\_\_

Owner

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Contact Person \_\_\_\_\_

Project Location

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Facility Age (yrs.) _____ | Size of Facility or Affected Part (sq.ft.) _____ |
|---------------------------|--------------------------------------------------|

| #Floors Affected | Present and Prior Use of Facility |
|------------------|-----------------------------------|
| 1                | 1                                 |
| 2                | 1                                 |
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| 98               | 1                                 |
| 99               | 1                                 |
| 100              | 1                                 |

**TYPE OF PROJECT (CHECK ONLY ONE):**

☐ Renovation
 ☐ Demolition
 ☐ Ordered Demolition
 ☐ Emergency
 ☐ Long-term

**PROJECT DATES:**

Start Removal \_\_\_\_\_ End Removal \_\_\_\_\_

| Start Renovation/Demolition | End Renovation/Demolition |
|-----------------------------|---------------------------|
|                             |                           |

**Amount of ACM to be Removed:**

|             | Regulated ACM<br>(RACM) | Category II<br>nonfriable ACM<br>(optional) | Category I<br>nonfriable ACM<br>(optional) |
|-------------|-------------------------|---------------------------------------------|--------------------------------------------|
| Linear Feet |                         |                                             |                                            |
| Square Feet |                         |                                             |                                            |
| Cubic Feet  |                         |                                             |                                            |

**INSTRUCTIONS FOR COMPLETING FORM DEP7036: NOTIFICATION OF ASBESTOS ABATEMENT/DEMOLITION/RENOVATION**

**Filing Deadline:** This form must be completed and filed with the Kentucky Division for Air Quality at least ten (10) working days before starting any asbestos removal, demolition, or other work which will disturb asbestos-containing material (ACM) in Kentucky facilities outside Jefferson County and in schools statewide, including Jefferson County. File with appropriate Regional Office.

**Renotification:** If developments occur that invalidate information on a notification (e.g., changes in dates, amounts, locations), file a revised form within the time frames specified in 401 KAR 58:025. Notifications may be numbered in the top-left corner (optional). First two digits are project year; remaining digits are project number (e.g., the first project in 1999 is 99-1).

**Attachments:** Attachments may be included to provide additional information, propose alternative procedures, declare nonfriable removal, identify secondary transporters, etc.

***Line-by-Line Instructions:***

**Contractor/Owner:** the contractor is the asbestos remover (or, for zero-asbestos demolitions, the demolition contractor). The owner is the entity having the work done.

**Project Location:** The location at the address given where the work is taking place (e.g., which building/floor/room?).

**Present/Prior Use:** Enter the present and prior use(s) of the facility.

**Type of Project:** Each choice shown in this category has a specific description under 401 KAR 58:025:

Emergency renovations result from a sudden, unexpected event. If the project is an emergency renovation, attach a detailed description of the sudden, unexpected event that necessitated removal. Include the exact date and hour the event occurred and explain how the event caused an unsafe condition, or would cause equipment damage or unreasonable financial burden.

Planned renovations are renovations that do not qualify as emergency renovations.

A long-term notification is a type of planned renovation which involves a number of nonscheduled small-scale removals whose annual total exceeds the NESHAP threshold amounts and can be estimated based on past years' experience. File yearly estimate at least 10 working days before the beginning of the calendar year for which a long-term notification is being given.

Demolitions involve the wrecking or taking out of a load-supporting structural member, such as a load-bearing beam or wall. Tearing down a structure, dismantling it piecemeal, and moving it from one place to another are all considered demolitions.

Ordered demolitions must result from a demolition order issued by a government agency because the building is structurally unsound and in danger of imminent collapse. For ordered demolitions, attach to the notification a signed, dated copy of order that includes demolition deadlines and name/title/authority of the government representative issuing the order.

**Project Dates:** Schedules must be precise and accurate. The "start removal" date is the date the removers arrive on-site and begin physically preparing the work area for removal. "End removal" is the date the removers dismantle the work area after cleaning and clearing it. If circumstances arise that invalidate previously submitted start dates, a revised notification must be submitted showing the updated, correct start date. If the start date has been moved up, submit written renotification at least ten working days before the new start date. If the start date has been moved back, telephone the Division as soon as possible before the original date and submit written renotification no later than the original start date.

Schedules for renovation and demolition (next line after removal schedule) are handled similarly, except that renotification is required only for schedule changes involving demolitions, not renovations.

**Amount of ACM:** In this table, enter the amount and type (RACM, Category I, and/or Category II) of asbestos that will be removed. Although the regulation does not require you to identify the amount of nonfriable ACM that will be removed, the table provides space for nonfriable ACM to accommodate those notifiers who choose to document these removals.


**Description of project:** Describe the demolition or renovation work to be performed and method(s) to be used, including work practices and engineering controls to be used.

**Asbestos Detection Technique:** Give a general description of the asbestos survey, for example, "AHERA-style survey by accredited inspector; samples analyzed by PLM."

**Amount of nonfriable ...:** If all nonfriable ACM will be properly removed, enter "NA."

**Contingency Plans:** If Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder, or if additional RACM is discovered, describe procedures to be followed. For example, "Move demolition activity away from ACM immediately; remove the ACM using regulation-required procedures." Even "Stop work, call Division for Air Quality" is OK.

|                                                                                 |                                                                                                                     |                                          |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------|
|  | <b>KENTUCKY TRANSPORTATION CABINET</b><br>Department of Highways<br><b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b> | TC 62-226<br>Rev. 01/2016<br>Page 1 of 1 |
| <b>RIGHT OF WAY CERTIFICATION</b>                                               |                                                                                                                     |                                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Original</b> | <input type="checkbox"/> | <b>Re-Certification</b>        | <b>RIGHT OF WAY CERTIFICATION</b>                                                                                                  |                                                 |
| <b>ITEM #</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 | <b>COUNTY</b>            |                                | <b>PROJECT # (STATE)</b>                                                                                                           | <b>PROJECT # (FEDERAL)</b>                      |
| 09-1084.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 | Fleming                  |                                | FD52 035 8732701R                                                                                                                  | BRO 5215 (011)                                  |
| <b>PROJECT DESCRIPTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                          |                                |                                                                                                                                    |                                                 |
| ADDRESS DEFICIENCIES OF BRIDGE ON KY 32 OVER MUD LICK CREEK 0.2 MILES W OF CRAINTOWN RD (CR 1302)035B00038N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                 |                          |                                |                                                                                                                                    |                                                 |
| <input type="checkbox"/> <b>No Additional Right of Way Required</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |                                |                                                                                                                                    |                                                 |
| Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| <input checked="" type="checkbox"/> <b>Condition # 1 (Additional Right of Way Required and Cleared)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                          |                                |                                                                                                                                    |                                                 |
| All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| <input type="checkbox"/> <b>Condition # 2 (Additional Right of Way Required with Exception)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| <input type="checkbox"/> <b>Condition # 3 (Additional Right of Way Required with Exception)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. |                 |                          |                                |                                                                                                                                    |                                                 |
| Total Number of Parcels on Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 | 3                        | EXCEPTION (S) Parcel #         |                                                                                                                                    | ANTICIPATED DATE OF POSSESSION WITH EXPLANATION |
| Number of Parcels That Have Been Acquired                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                          |                                |                                                                                                                                    |                                                 |
| Signed Deed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                 | 3                        |                                |                                                                                                                                    |                                                 |
| Condemnation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          |                                |                                                                                                                                    |                                                 |
| Signed ROE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                          |                                |                                                                                                                                    |                                                 |
| <b>Notes/ Comments (Use Additional Sheet if necessary)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                          |                                |                                                                                                                                    |                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |                                |                                                                                                                                    |                                                 |
| <b>LPA RW Project Manager</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                          | <b>Right of Way Supervisor</b> |                                                                                                                                    |                                                 |
| Printed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          |                                | Printed Name James R. Mason                                                                                                        |                                                 |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                          |                                | Signature  Digitally signed by James R. Mason |                                                 |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |                          |                                | Date: 2020.01.24 14:39:54 -05'00'                                                                                                  |                                                 |
| <b>Right of Way Director</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          | <b>FHWA</b>                    |                                                                                                                                    |                                                 |
| Printed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          |                                | Printed Name                                                                                                                       |                                                 |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                          |                                | Signature                                                                                                                          |                                                 |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |                          |                                | Date                                                                                                                               |                                                 |

KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
DIVISION OF RIGHT OF WAY & UTILITIESTC 62-226  
Rev. 01/2016  
Page 1 of 1

## RIGHT OF WAY CERTIFICATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                           |                            |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------|-------------------------------------------------|
| <input checked="" type="checkbox"/> Original                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> Re-Certification | RIGHT OF WAY CERTIFICATION |                                                 |
| ITEM #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | COUNTY                                    | PROJECT # (STATE)          | PROJECT # (FEDERAL)                             |
| 09-10002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Carter                                    | 1100 FD04 121 9414001R     |                                                 |
| PROJECT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |                            |                                                 |
| Bridging Kentucky - 022B00006N - KY 1 over Powell Branch (replacement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                           |                            |                                                 |
| <input type="checkbox"/> No Additional Right of Way Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                           |                            |                                                 |
| Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                           |                            |                                                 |
| <input checked="" type="checkbox"/> Condition # 1 (Additional Right of Way Required and Cleared)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                           |                            |                                                 |
| All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.                                                                                                    |                                           |                            |                                                 |
| <input type="checkbox"/> Condition # 2 (Additional Right of Way Required with Exception)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                           |                            |                                                 |
| The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract                                                                                                                                                                                                    |                                           |                            |                                                 |
| <input type="checkbox"/> Condition # 3 (Additional Right of Way Required with Exception)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                           |                            |                                                 |
| The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. |                                           |                            |                                                 |
| Total Number of Parcels on Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                                         | EXCEPTION (S) Parcel #     | ANTICIPATED DATE OF POSSESSION WITH EXPLANATION |
| Number of Parcels That Have Been Acquired                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                           |                            |                                                 |
| Signed Deed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6                                         |                            |                                                 |
| Condemnation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0                                         |                            |                                                 |
| Signed ROE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0                                         |                            |                                                 |
| Notes/ Comments (Use Additional Sheet if necessary)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |                            |                                                 |
| LPA RW Project Manager                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                           | Right of Way Supervisor    |                                                 |
| Printed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                           | Printed Name               | Mark Askin, PE                                  |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                           | Signature                  | Askin, Mark                                     |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                           | Date                       | 07/02/20                                        |
| Right of Way Director                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           | FHWA                       |                                                 |
| Printed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Dean M. Loy                               | Printed Name               |                                                 |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DM Loy                                    | Signature                  |                                                 |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                           | Date                       |                                                 |

## UTILITIES AND RAIL CERTIFICATION NOTE

**Fleming County**  
**00BRO5215011**  
**FD52 035 8732701U**  
**Mile point: 7.760 TO 7.800**  
**ADDRESS DEFICIENCIES OF BRIDGE ON KY 32 OVER MUD LICK CREEK 0.2 MILES W OF CRAINTOWN RD**  
**(CR 1302)035B00038N**  
**ITEM NUMBER: 09-1084.00**

### PROJECT NOTES ON UTILITIES

For all projects under 2000 Linear feet which require a normal excavation locate request pursuant to KRS 367.4901-4917, the awarded contractor shall field mark the proposed excavation or construction boundaries of the project (also called white lining) using the procedure set forth in KRS 367.4909(9)(k). For all projects over 2000 linear feet, which are defined as a "Large Project" in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to



## UTILITIES AND RAIL CERTIFICATION NOTE

Fleming County  
00BRO5215011  
FD52 035 8732701U  
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(CR 1302)035B00038N  
ITEM NUMBER: 09-1084.00

367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

**NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS**

Western Fleming County Water District - Water

**\*The Contractor is fully responsible for protection of all utilities listed above\***

**THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION**

Windstream Communications – Telephone – Complete by May 1, 2020

Fleming-Mason Energy Cooperative, Inc. – Electric - Complete by May 1, 2020

UTILITIES AND RAIL CERTIFICATION NOTE

|                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Fleming County<br/>00BRO5215011<br/>FD52 035 8732701U<br/>Mile point: 7.760 TO 7.800<br/>ADDRESS DEFICIENCIES OF BRIDGE ON KY 32 OVER MUD LICK CREEK 0.2 MILES W OF CRAINTOWN RD<br/>(CR 1302)035B00038N<br/>ITEM NUMBER: 09-1084.00</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

City of Flemingsburg Utilities - Sewer

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☒ No Rail Involvement    ☐ Rail Involved    ☐ Rail Adjacent

UTILITIES AND RAIL CERTIFICATION NOTE

Fleming County  
00BRO5215011  
FD52 035 8732701U  
Mile point: 7.760 TO 7.800  
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(CR 1302)035B00038N  
ITEM NUMBER: 09-1084.00

AREA FACILITY OWNER CONTACT LIST

| Facility Owner                                       | Address                                  | Contact Name     | Phone      | Email                        |
|------------------------------------------------------|------------------------------------------|------------------|------------|------------------------------|
| City of Flemingsburg<br>Utilities - Sewer            | P.O. Box 406<br>Flemingsburg KY<br>41041 | Bobby<br>Money   | 6068450907 | mayor@altiusbb.com           |
| Fleming-Mason Energy<br>Cooperative, Inc. - Electric | PO Box 328<br>Flemingsburg KY<br>41041   | Brandon<br>Hunt  | 6068452661 | bhunt@fme.coop               |
| Western Fleming County<br>Water District - Water     | P.O. Box 16 Ewing<br>KY 41039            | Vernon<br>Barton | 6062672120 | wfwd@widstream.net           |
| Windstream<br>Communications -<br>Telephone          | P.O. Box 25410<br>Little Rock AK 72212   | Chris<br>Barker  | 6067844140 | Chris.Barker@windstream.com> |

## UTILITIES AND RAIL CERTIFICATION NOTE

**Carter County**  
**ADDRESS DEFICIENCIES OF KY-1 BRIDGE OVER POWELL BRANCH. (022B00006N)**  
**ITEM NUMBER: 09-10002.00**

### PROJECT NOTES ON UTILITIES

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

## UTILITIES AND RAIL CERTIFICATION NOTE

**Carter County**  
**ADDRESS DEFICIENCIES OF KY-1 BRIDGE OVER POWELL BRANCH. (022B00006N)**  
**ITEM NUMBER: 09-10002.00**

**NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS**

Grayson Utilities Commission - Water

Grayson Utilities Commission - Natural Gas

Kentucky Power Company - Electric

Windstream Kentucky East, Inc. - Telephone

Suddenlink - CATV

**\*The Contractor is fully responsible for protection of all utilities listed above\***

**THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION**

Grayson Utilities Commission- Water & Natural Gas will be relocating their facilities and will be complete with the relocations on or before July 15, 2020.

Kentucky Power Company (AEP)- Electric will be relocating their facilities and will be complete with the relocations on or before June 1, 2020.

Windstream Kentucky East, Inc. – Telephone will be relocating their facilities and will be complete with the relocations on or before June 1, 2020.

Suddenlink – CATV will be relocating their facilities and will be complete with the relocations on or before June 1, 2020.

UTILITIES AND RAIL CERTIFICATION NOTE

|                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|
| <p>Carter County</p> <p>ADDRESS DEFICIENCIES OF KY-1 BRIDGE OVER POWELL BRANCH. (022B00006N)</p> <p>ITEM NUMBER: 09-10002.00</p> |
|----------------------------------------------------------------------------------------------------------------------------------|

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☒ No Rail Involvement    ☐ Rail Involved    ☐ Rail Adjacent

## UTILITIES AND RAIL CERTIFICATION NOTE

**Carter County**  
**ADDRESS DEFICIENCIES OF KY-1 BRIDGE OVER POWELL BRANCH. (022B00006N)**  
**ITEM NUMBER: 09-10002.00**

### AREA FACILITY OWNER CONTACT LIST

| Facility Owner                             | Address                                 | Contact Name    | Phone      | Email                                  |
|--------------------------------------------|-----------------------------------------|-----------------|------------|----------------------------------------|
| Grayson Utilities Commission - Natural Gas | 671 South State Hwy. 7 Grayson KY 41143 | Gerald Haney    | 6064747569 | utilitysupt@graysonutilities.com       |
| Grayson Utilities Commission - Water       | 671 South State Hwy. 7 Grayson KY 41143 | Gerald Haney    | 6064747569 | utilitysupt@graysonutilities.com       |
| Kentucky Power Company - Electric          | 12333 Kevin Avenue Ashland KY 41102     | Ronald Canfield | 6069291462 | rlcanfield@aep.com                     |
| SuddenLink - CATV                          | PO BOX 1220<br>Scott Depot, WV 25560    | Rusty Pauley    | 3046541137 | Rusty.pauley@alticetechservicesusa.com |
| Windstream Kentucky East, Inc. - Telephone | 130 W New Circle Rd. Lexington KY 40505 | Barry Lyons     |            | Barry.E.Lyons@windstream.com           |

# **GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT**

The contractor should be aware the following utility notes and KYTC Utility Bid Item Descriptions shall supersede, replace and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

## **PROTECTION OF EXISTING UTILITIES**

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

## **PREQUALIFIED UTILITY CONTRACTORS**

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. Those utility owners with a prequalification or preapproval requirement are as follows:

Thompson Brothers Construction 606-776-0516, Hillsboro KY

ASL Excavating, Inc. 606-849-4911, Flemingsburg KY

G & W Construction 606-784-2396, Morehead KY

Tilton Excavating, LLC 606-724-5688, Mount Olivet KY

The bidding contractor needs to review the above list and choose from the list of approved subcontractors at the end of these general notes as identified above before bidding. When the list of approved subcontractors is provided, only subcontractors shown on the following list(s) will be allowed to work on that utility as a part of this contract.



When the list of approved subcontractors for the utility work is not provided in these general notes, the utility work can be completed by the prime contractor. If the prime contractor chooses to subcontract the work, the subcontractor shall be prequalified with the KYTC Division of Construction Procurement in the work type of "Utilities" (I33). Those who would like to become prequalified may contact the Division of Construction Procurement at (502) 564-3500. Please note: it could take up to 30 calendar days for prequalification to be approved. The prequalification does not have to be approved prior to the bid, but must be approved before the subcontract will be approved by KYTC and the work can be performed.

#### CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

#### SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

#### ENGINEER

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

### INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word “Inspector” or “Resident Project Representative” appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the “Inspector” or “Resident Project Representative” is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

### NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

### UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shut downs are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns. If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so following the rules, procedures and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shut downs is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be; but is not limited to, a door hanger, notice by newspaper ad, telephone contact, or any combination of communication methods deemed necessary, customary and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner’s shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

CUSTOMER SERVICE AND LATERAL ABANDONMENTS When temporary or permanent abandonment of customer water, gas, or sewer services or laterals are necessary during relocation of utilities included in the contract, the utility contractor shall perform these abandonments as part of the contract as incidental work. No separate payment will be made for service line and lateral abandonments. The contractor shall provide all labor, equipment and materials to accomplish the temporary or permanent abandonment in accordance with the plans, specifications and/or as directed by the engineer. Abandonment may include, but is not limited to, digging down on a water or gas main at the tap to turn off the tap valve

or corporation stop and/or capping or plugging the tap, digging down on a sewer tap at the main and plugging or capping the tap, digging down on a service line or lateral at a location shown on the plans or agreeable to the engineer and capping or plugging, or performing any other work necessary to abandon the service or lateral to satisfactorily accomplish the final utility relocation.

### STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

### RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be "in-kind" as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

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BELOW ARE NOTES FOR WHEN "INST" ITEMS ARE IN THE CONTRACT MEANING THE UTILITY COMPANY IS PROVIDING CERTAIN MATERIALS FOR UTILITY RELOCATION

### MATERIAL

Contrary to Utility Bid Item Descriptions, those bid items that have the text "**Inst**" at the end of the bid item will have the major components of the bid item provided by the utility owner. No direct payment will be made for the major material component(s) supplied by the utility company. All remaining materials required to construct the bid item as detailed in utility bid item descriptions, in utility specifications and utility plans that are made a part of this contract will be supplied by the contractor. The contractor's bid price should reflect the difference in cost due to the provided materials.

The following utility owners have elected to provide the following materials for work under this contract:

***"No materials are being supplied by the utility owner(s). All materials are to be supplied by the contractor per bid item descriptions, utility specifications and utility plans."***

### SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility

contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

# Standard Sanitary Sewer Bid Item Descriptions

**S BYPASS PUMPING** This item shall include all labor, equipment, and materials needed to complete a bypass pumping and/or hauling operation for diversion of sewage during sanitary sewer construction. Examples of such operations when bypass pumping and/or hauling may be necessary is during force main tie-ins, manhole invert reconstruction, insertion of new manholes into existing mains, or other similar construction. There may be more than one bypass pumping/hauling operation on a project. This item shall be paid for each separate bypass pumping/hauling operation occurrence as called out on the plans or directed by the engineer and actually performed. There will be no separate bid items defined for length, duration, or volume of sewage pumped or hauled in each occurrence. If a bypass pumping/hauling operation is called out on the plans; but, conditions are such that the bypass pumping/hauling operation is not needed or utilized, no payment will be made under this item. The contractor shall draw his own conclusions as to what labor, equipment, and materials may be needed for each bypass pumping/hauling occurrence. The contractor should be prepared to handle the maximum volume of the sewer being bypassed, even during a storm event. This item shall not be paid separately, but shall be considered incidental, when bypass pumping and/or hauling is needed during cast-in-place-pipe (CIPP) and/or point repair operations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

**S CIPP LATERAL SERVICE INVESTIGATION** This item shall include all equipment, materials, labor and incidentals necessary to enter the sewer in compliance with all safety/confined space requirements and perform the identification, assessment and pre-measurement of all existing and abandoned laterals for the placement of Cured-In-Place-Pipe lining. This item shall be in payment for all lateral service investigation for all sewer segments to be lined as a part of this contract. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be LUMP SUM (LS).

**S CIPP LATERAL REINSTATEMENT** This item is to pay for installing a Cured-In-Place-Pipe liner in service laterals and service/mainline connections to stabilize structural defects and construction inadequacies. This bid item shall include all labor, equipment, materials and incidentals necessary to perform the service lateral reinstatement in accordance with the plans and specifications. Work under this item shall include bypass pumping, sewer flow control, pre-installation cleaning, sealing connections to existing sewer main, pre- and post- construction CCTV inspection and final testing of the CIPP system. This item shall also include the "top hat" required by the specifications. All CIPP lateral reinstatements shall be paid under this item regardless of the size or length of reinstatement. No separate bid items of varying sizes or length of CIPP lateral reinstatement will be provided in the contract. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each CIPP lateral reinstatement complete and ready for use.

**S CIPP LINER** This bid Item is to pay for rehabilitation of existing sanitary sewers using the Cured-In-Place-Pipe method. This bid item description applies to all CIPP sizes included in the contract.

All CIPP Liner items of all varying sizes shall include all labor, materials, customer notification, testing, necessary permits, ingress and egress procedures, bypass pumping, pre-construction video, sediment and root removal, dewatering, traffic control, erosion and sediment control, excavation pits, removal and replacement of manhole frames and covers as necessary to facilitate the lining work, sealing at manholes and service connections, clearing and grubbing, pipeline cleaning, re-cleaning and video inspection as many times as necessary, debris collection and disposal, root removal, pre- and post-construction video inspection, all digital inspection footage, final report preparation and approval, the cost of potable water from the Owner, required compliance tests, site restoration, site cleanup, sealing of liner at manholes, acceptance testing and all other rehabilitation work and incidentals not included under other pay items necessary to complete the rehabilitation per the plans and specifications. There will be no separate payment for acceptance testing of the lined pipe; but shall be considered incidental to this item. Pay under this item shall be by each size bid in the contract. Pay measurement shall be from center of manhole to center of manhole. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S CIPP PROTRUDING LATERAL REMOVAL** This item includes all equipment, materials, labor and incidentals necessary to enter the sewer in compliance with all safety/confined space requirements, remove a sufficient amount of the protruding tap to insure a proper and safe Cured-In-Place-Pipe lining insertion and perform pre-installation CCTV. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each protruding lateral removed.

**S CONCRETE PIPE ANCHOR** This item shall be constructed on the sewer pipe at the locations shown on the plans in accordance with sanitary sewer specifications and standard drawings. Payment for concrete anchors will be made at the contract unit price each in place complete and ready for use. Each concrete anchor of sewer pipe or force main shall be paid under one bid item per contract regardless of the sizes of carrier pipe being anchored in the contract. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S DIRECTIONAL BORE** Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of force main or gravity sewer under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S ENCASEMENT CONCRETE** Includes all labor, equipment, excavation, concrete, reinforcing

steel, backfill, restoration, and etc., to construct the concrete encasement of the sewer or force main as shown on the plans, and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasement shall be paid under one bid item included in the contract regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

**S ENCASEMENT STEEL BORED** This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

- Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
- Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
- Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
- Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
- Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
- Range 6 = All encasement sizes greater than 24 inches

*(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.)* Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S ENCASEMENT STEEL OPEN CUT** This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open cut install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

- Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
- Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
- Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
- Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
- Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
- Range 6 = All encasement sizes greater than 24 inches

*(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.)* Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S FORCE MAIN** This description shall apply to all PVC and ductile iron and polyethylene/plastic pipe bid items of every size and type, except those bid items defined as “Special”. This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specification), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. This item shall also include pipe anchors on polyethylene pipe runs as shown on the plans or required by the specifications to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S FORCE MAIN AIR RLS/VAC VLV** This bid item description shall apply to all force main air release/vacuum valve installations of every size except those defined as “Special”. This item shall include the air release/vacuum valve, main to valve connecting line or piping, manhole/vault/structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release/vacuum valve at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. All air release/vacuum valves on a project shall be paid under one bid item regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release/vacuum valve would a separate bid item be established. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S FORCE MAIN DIRECTIONAL BORE** Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of sewer or force main under streets, buildings, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S FORCE MAIN POINT RELOCATE** This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. This bid item is to be used to relocate an existing force main at point locations such as to clear a conflict at a



proposed drainage structure, pipe or any other similar short relocation situation, and where the existing pipe material is to be reused. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specification as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case by case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Force Main Relocate shall not be paid on a linear feet basis; but shall be paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

**S FORCE MAIN TAP SLEVE/VALVE RANGE 1 OR 2** This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready for use in accordance with the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Range 1 = All live tapped main sizes up to and including 8 inches

Range 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S FORCE MAIN TIE-IN** This bid description shall be used for all force main tie-in bid items of every size except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, testing and backfill required to make the force main tie-in as shown on the plans and in accordance with the specifications complete and ready for use. This bid item shall include purge and sanitary disposal of any sewage from any abandoned segments of force main. Pipe for tie-ins shall be paid under separate bid items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S FORCE MAIN VALVE** This description shall apply to all force main valves of every size required in the plans and specifications, except those bid items defined as "Special". Payment under this description is to be for gate or butterfly force main valves being installed with new force main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, and etc., required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, force main valves shall be restrained. Force main valve restraint shall be considered incidental to the force main valve and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be

referenced. This item shall be paid EACH (EA) when complete.

**S FORCE MAIN VALVE BOX ADJUST** Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, and etc., to adjust the top of the force main valve box to finished grade complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S LATERAL CLEANOUT** This item shall be for payment for installation of a cleanout in a service lateral line. This item shall include furnishing and installation of a tee, vertical pipe of whatever length required, and threaded cap. The cleanout shall extend from the lateral to final grade elevation. The size of the cleanout shall be equivalent to the size of the lateral. The cleanout materials shall meet the same specification as those for the lateral. The cleanout shall be installed at the locations shown on the plans or as directed by the engineer. Only one pay item shall be established for cleanout installation. No separate pay items shall be established for size or height variances. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S LATERAL LOCATE** This bid item is to pay for all labor, equipment, and materials needed in locating an existing sanitary sewer service lateral for tie-in of the lateral to new mainline sewers and/or for the relocation of a lateral. This bid item shall be inclusive of any and all methods and efforts required to locate the lateral for tie-in or relocation of the lateral. Locating methods to be included under this items shall include, but are not limited to, those efforts employing the use of video cameras from within an existing sanitary sewer main or lateral, electronic locating beacons and/or tracers inserted into the sanitary sewer main or lateral, careful excavation as a separate operation from mainline sewer or lateral excavation, the use of dyes to trace the flow of a lateral, or any combination of methods required to accurately locate the lateral. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

**S LATERAL LONG SIDE** This bid item description shall apply to all service lateral installations of every size up to and including 6 inch internal diameter, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service lateral installations where the ends of the lateral connection are on opposite sides of the public roadway. The new lateral must cross the centerline of the public roadway to qualify for payment as a long side lateral. The length of the service lateral is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service lateral across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S LATERAL SHORT SIDE** This bid item description shall apply to all service lateral installations of every size up to and including 6 inch, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap tee, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for lateral installations where both ends of the lateral connection are on the same side of the public roadway, or when an existing lateral crossing a public roadway will remain and is being extended, reconnected, or relocated with all work on one side of the public roadway centerline as shown on the plans. The length of the service lateral is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the lateral crosses a private residential or commercial entrance; but, not a public roadway. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S LINE MARKER** This item is for payment for furnishing and installing a sewer utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

**S MANHOLE** Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole. Payment for manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup in accordance with the specifications and standard drawings. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE ABANDON/REMOVE** Payment under this item is for the partial removal and/or filling of any sanitary sewer manhole regardless of size or depth that no longer serves any purpose. Payment shall be made regardless of whether the manhole is or is not in conflict with other work. Any manhole requiring partial removal, but not total removal, in order to clear a conflict with other work shall be paid under this item. All manholes partially removed shall be removed to a point at least one foot below final grade, one foot below roadway subgrade, or one foot clear of any other underground infrastructure, whichever is lowest. If partial removal of an abandoned manhole is elected by the contractor, the remaining manhole structure shall be refilled with flowable fill. Payment for disposal of a sanitary sewer manhole will be made under this item only. Please refer to the Utility Company's

Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE ADJUST TO GRADE** Payment under this item is for the adjustment of sanitary sewer casting elevation on all sizes of existing sanitary manholes. This work shall be performed in accordance with the sanitary sewer specifications. Payment shall be made under this bid item regardless of the amount of adjustment necessary to a sanitary sewer manhole casting or diameter of the manhole. Work under this pay item may be as simple as placing a bed of mortar under a casting; but, shall also be inclusive of installation of adjusting rings, and /or addition, removal, or replacement of barrel sections. The existing casting is to be reused unless a new casting is specified on the plans. New casting, when specified, shall be paid as a separate bid item. Anchoring of the casting shall be incidental to this item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE CASTING STANDARD** Payment under this bid items is for furnishing of a new standard traffic baring casting for sanitary manholes meeting the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

**S MANHOLE CASTING WATERTIGHT** Payment under this bid item is for furnishing of a new watertight traffic baring casting for sanitary manholes meeting the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

**S MANHOLE RECONSTRUCT INVERT** This bid item is to pay for all labor, equipment, and material for rework of the manhole bench to redirect or eliminate flow, such as when the flow of a pipe or pipes are being removed or redirected. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in elimination or redirect of flow. This item shall also include providing and placement of a rubber seal or boot as required by utility specification, standard drawing or plan. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. No payment shall be made under this bid when MANHOLE TAP EXISTING, or MANHOLE TAP EXISTING ADD DROP are being paid at the same location, as this type of work is included in those items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE TAP EXISTING** This bid item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base, addition of a rubber seal as specified, and rework of the manhole bench to direct the additional pipe flow. The bid item shall be paid for each core opening added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the

specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE TAP EXISTING ADD DROP** This bid item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base, addition of a rubber seal as specified, addition of a vertical drop pipe to the outside of the manhole, placement of reinforcing steel and concrete to encase vertical pipe, and rework of the manhole bench to direct the additional pipe flow. The bid item shall be paid for each drop added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE WITH DROP** Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole with drop. Payment for drop manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Drop manholes shall include concrete base, barrel sections, drop materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE WITH LINING** Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole with corrosion resistant lining. Payment for manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, lining, excavation, backfilling, air testing, restoration, and cleanup in accordance with the standard drawings. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S MANHOLE WITH TRAP** Payment under this item is for the installation of a new manhole with

trap. Payment for trap manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Trap manholes shall include concrete base, manhole structure and trap materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. All materials, except casting, shall be new and unused. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S PIPE** This description shall apply to all PVC and ductile iron gravity sewer pipe bid items of every size and type 8 inches internal diameter and larger, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, tap tees and couplings for joining to existing similar or dissimilar pipes), polyethylene wrap (if required by specification), labor, equipment, excavation, bedding, restoration, pressure or vacuum testing, temporary testing materials, video inspection, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. This bid item shall include material and placement of flowable fill under existing and proposed pavement, and wherever specified on the plans or in the specifications. No additional payment will be made for rock excavation. Measurement of quantities under this item shall be through fittings and encasements to a point at the outside face of manhole barrels, or to the point of main termination at dead ends or lamp holes. Carrier pipe placed within an encasement shall be paid under this item and shall include casing spacers and end seals. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S PIPE POINT REPAIR** This item is to be used to pay for repair of short lengths of existing sanitary sewer pipe that, through prior video inspection or other means, are known to have pre-existing failure. Pipe Point Repair may be needed in preparation for installation of cured-in-place-pipe (CIPP) lining or other instances where failure is known and repair is prudent. The size of pipe shall not be defined in separate bid items. All diameter sizes of point repair shall be paid under this one item. The materials to be used to make the repair shall be as defined on the plans or in the specifications. This bid item shall include all excavation, pipe materials, joining materials to connect old and new pipe, bedding, and backfill to complete the repair at the locations shown on the plans or as directed by the engineer, complete and ready for use. This bid item shall include bypass pumping when required. Measurement shall be from contact point to contact point of old and new pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

**S PUMP STATION** This item is for payment for installation of sanitary pump stations including above or below ground structure for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall

be referenced. This item shall be paid LUMP SUM (LS) for each when complete.

**S STRUCTURE ABANDON** This item is to be used to pay for abandonment of larger above or below ground sewer structures such as air release/vacuum valve vaults, pump stations, tanks, etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to sewer construction, (i.e., abandonment of standard air release/vacuum valves up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

**S STRUCTURE REMOVAL** This item is to be used to pay for removal of larger above or below ground sewer structures such as air release/vacuum valve vaults, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however, structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to sewer construction, (i.e., removal of standard air release/vacuum valves and their structure up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

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## SPECIAL CONDITIONS

### 1. PROJECT CONSTRUCTION OBSERVATION

The construction observation services shall be provided by the ENGINEER. The Observer shall be on the project as much as possible; however, due to meetings, etc. there may be times when he is not with the crew. Therefore, the CONTRACTOR shall not backfill any main lines and/or appurtenances, structures or other installed infrastructure until the Observer has seen and accepted the work for payment.

Any work backfilled without the Observer's knowledge and consent shall not be allowed for payment to the CONTRACTOR and shall be uncovered for inspection at no additional cost to the OWNER or ENGINEER.

### 2. UNCLASSIFIED EXCAVATION

All excavation is unclassified. No extra payment will be allowed for rock excavation of any kind. It is the CONTRACTOR's responsibility to make any additional investigations to determine depth, location or competency of rock within the project area.

### 3. CONFLICTING SECTIONS/STATEMENTS IN CONTRACT DOCUMENTS

#### a. General

It shall be noted that if any provisions in these Contract Documents is in conflict and/or is inconsistent with any other section or provisions, then the most stringent shall apply per the interpretation of the ENGINEER and/or OWNER.

### 4. FEDERAL/STATE/LOCAL REGULATIONS

The CONTRACTOR shall abide by all local and state laws or ordinances to the extent that such requirements do not conflict with federal laws or regulations. Compliance with any and all applicable laws and/or regulations is strictly the CONTRACTOR's responsibility.

### 5. SILTATION AND SOIL EROSION

The CONTRACTOR shall make every effort during construction to minimize siltation and soil erosion and comply with all local and state codes that pertain to this project. Any applicable permits shall be the CONTRACTOR's responsibility to obtain, at no additional cost to the OWNER.

6. ROUGH CLEAN UP

- a. Rough clean up shall be performed on a daily basis concurring with the daily rate of production for pay items, amounts and/or quantities listed in the schedule of values and/or Bid Schedule.
- b. The CONTRACTOR is to provide sufficient labor and equipment for clean up as to not impede production schedules.
- c. Rough clean up shall be defined as follows:
  - 1. All open ditches shall be backfilled on a daily basis.
  - 2. Debris (rocks, roots, timber, etc.) shall be removed from the job site on a daily basis. This material may be stockpiled with the consent of the OWNER and the ENGINEER in designated locations. Any such locations shall be arranged by the CONTRACTOR with the written consent of the property owner.
  - 3. Remaining backfill material (soil) shall be windrowed back on top of the ditch line, compacted and leveled giving consideration for settlement.
- d. At the direction of the ENGINEER, OWNER, or their appointed representatives, the CONTRACTOR shall readdress areas if identified as not being adequate in the initial rough clean up process.

7. QUANTITIES OF MATERIALS

The quantities of materials listed on the Bid Schedule are estimates only and are subject to changes in the field. The CONTRACTOR shall verify these quantities before ordering materials. In the event of an under run or over run of materials, the CONTRACTOR shall be responsible for any shipping and/or restocking fees.

8. DISPOSAL OF TRENCH WATER

The CONTRACTOR shall not dispose of any trench water by allowing it to enter any sanitary sewer system without first obtaining written permission to do so from the owner of said system. Documentation of written permission must be provided to the ENGINEER and OWNER.

9. RECORD DRAWINGS

The CONTRACTOR shall maintain a set of plans with current mark ups showing any changes made in the field to the location, orientation, etc. of any element of the project during construction. This set of plans shall be provided to the ENGINEER at the conclusion of the project and shall be used by the ENGINEER in developing the most accurate set of construction Record Drawings possible for the OWNER. Upon request by the CONTRACTOR, the set of plans shall be returned.

10. CASING PIPE SURVEY REQUIREMENTS

The CONTRACTOR shall provide a licensed land surveyor in the State of Kentucky to determine the horizontal and vertical location of all casing pipes under State and Federal highways on projects involving Kentucky Transportation Cabinet Utility Relocations. This information shall be provided to the ENGINEER along with the CONTRACTOR's field mark ups of the drawings to assist in the development of accurate Record Drawings.

11. CONTRACTOR SURVEY REQUIREMENTS

At the conclusion of a project, the CONTRACTOR shall provide the ENGINEER with electronic survey data from a licensed Professional Land Surveyor in the state of Kentucky. The provided data shall include horizontal and elevation data for the rim, invert and any other penetrations of all structures involved in the project. The data shall also include horizontal data for sewer lines, valves, casing pipes and any other items that would be deemed relevant by the ENGINEER. The data shall be in a format and coordinate system stipulated by the ENGINEER and shall be provided to the ENGINEER prior to final payment to the CONTRACTOR.

12. PIPELINE TESTING

CONTRACTOR shall pressure test sections of water line or force main no greater than 3,500 feet in length. Gravity sewers shall be tested in sections between manholes.

Mains shall be tested in accordance with the pressures listed in the table below and the contents of the technical specifications.

| <u>Pipe Classification</u> | <u>Test Pressure</u> |
|----------------------------|----------------------|
| PVC SDR-21, Cl. 200        | 185 psi              |
| PVC SDR-17, Cl. 250        | 215 psi              |
| PVC C-900 DR14, Cl. 200    | 250 psi              |
| Ductile Iron, Cl. 350      | 350 psi              |

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## **SECTION 01016**

### **Occupancy**

## **PART 1 GENERAL**

### **1.1 PARTIAL OCCUPANCY BY OWNER**

Whenever, in the opinion of the OWNER, any section or portion of the Work or any structure is in suitable condition, it may be put into use upon the written order of the OWNER and such usage will not be held in any way as an acceptance of said Work or structure, or any part thereof, or as a waiver of any of the provisions of these Specifications and the Contract. Pending final completion and acceptance of the Work, all necessary repairs and replacements, due to defective materials or workmanship or operations of the CONTRACTOR, for any section of the Work so put into use shall be performed by the CONTRACTOR at CONTRACTOR'S own expense.

END OF SECTION

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**SECTION 01041**  
**Project Coordination**

**PART 1 GENERAL**

**1.1 SCOPE**

- A. Management of the Project shall be through the use of a logical method of construction planning, inspection, scheduling and cost value documentation.
- B. The work under this Section includes all surface and subsurface condition inspections and coordination by the CONTRACTOR necessary for the proper and complete performance of the Work.
- C. This Section applies to the work of every division and every section of these Specifications.

**1.2 SITE CONDITIONS**

- A. Inspection
  - 1. Prior to performing any work under a section, the CONTRACTOR shall carefully inspect the installed work of other trades and verify that all such work is complete to the point where the work under that section may properly commence.
  - 2. The CONTRACTOR shall verify that all materials, equipment and products to be installed under a section may be installed in strict accordance with the original design and pertinent reviewed shop drawings.
- B. Discrepancies
  - 1. In the event of discrepancy, immediately notify the ENGINEER.
  - 2. Do not proceed with construction in areas of discrepancy until all such discrepancies have been fully resolved.

**1.3 COORDINATION**

- A. Carefully coordinate work with all other trades and subcontractors to insure proper and adequate interface of the work of other trades and subcontractors with the work of every section of these Specifications.
- B. The CONTRACTOR shall coordinate operations with all utility companies in or adjacent to the area of CONTRACTOR's work. The CONTRACTOR shall require said utilities to identify in the field their property and provide drawings as necessary to locate them.

END OF SECTION

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## **SECTION 01055**

### **Construction Staking**

## **PART 1 GENERAL**

### **1.1 SCOPE**

- A. Construction staking shall include all the surveying work required to layout the Work and control the location of the finished construction. The full responsibility for holding to alignment and grade shall rest upon the CONTRACTOR. All work under this Contract shall be constructed in accordance with the lines and grades on the Drawings or as given by the ENGINEER or OWNER.
- B. The OWNER will provide one bench mark and a baseline adjacent to the work site. The CONTRACTOR shall be responsible for setting offsets from these points and all other layout, staking and all other surveying required for the Work.
- C. The CONTRACTOR shall safeguard all points, stakes, grade marks, bench marks and monuments established on the Work, shall bear the cost of re-establishing same if disturbed and shall assume the entire expense of rectifying work improperly constructed due to failure to maintain and protect such established points, stakes and marks.
- D. Measurement of quantities for payment purposes which are different from drawing dimensions is included in this work.

### **1.2 QUALITY ASSURANCE**

- A. The CONTRACTOR shall furnish documentation prepared by a surveyor currently registered in the State of Kentucky confirming that staking is being done to the lines and grades shown in the Contract Documents. This requires that the CONTRACTOR hire, at the CONTRACTOR's own expense, a currently registered surveyor, acceptable to the OWNER, to provide ongoing confirmation of construction staking.
- B. Any deviations from the Drawings shall be confirmed by the ENGINEER prior to construction.

## **PART 2 PRODUCTS**

### **2.1 EQUIPMENT**

The CONTRACTOR shall furnish and use surveying equipment and supplies maintained in good working order.

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Construction Staking

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## **PART 3 EXECUTION**

### **3.1 FINAL GRADES**

Any variance with plan grades shall be identified by the surveyor and confirmed by the ENGINEER prior to installation of any improvements.

### **3.2 UTILITIES**

- A. Staking of utilities shall be done in accordance with generally accepted practice for the type of utility involved and as specified elsewhere in these Specifications.

END OF SECTION

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## SECTION 01340

### Shop Drawings, Product Data and Samples

## PART 1 GENERAL

### 1.1 SCOPE

- A. The work under this Section includes submittal to the ENGINEER of shop drawings, product data and samples required by the various sections of these Specifications.
- B. Submittal Contents: The submittal contents required are specified in each section.
- C. The following forms shall be used for all major components of the work:
  - 1. Typical Maintenance Summary Form
  - 2. Notice of Start of Manufacturing
  - 3. Notice of Shipment of Equipment
  - 4. Notice of Schedule Impact

The forms are included at the back of this section.

- D. Definitions: Submittals are categorized as follows:
  - 1. Shop Drawings
    - a. Shop drawings shall include technical data, drawings, diagrams, procedure and methodology, performance curves, schedules, templates, patterns, test reports, calculations, instructions, measurements and similar information as applicable to the specific item for which the shop drawing is prepared.
    - b. Provide newly-prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated) or appropriate number of prints hereof, with name or preparer (firm name) indicated. The Contract Drawings shall not be traced or reproduced by any method for use as or in lieu of detail shop drawings. Show dimensions and note which are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards and special coordination requirements. Do not allow shop drawing copies without appropriate final "Action" markings by the ENGINEER to be used in connection with the Work.
    - c. Drawings shall be presented in a clear and thorough manner. Details shall be identified by reference to sheet and detail, specification section, schedule or room numbers shown on the Contract Drawings.



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Shop Drawings, Product Data and Samples

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- d. Minimum assembly drawings sheet size shall be 24 x 36-inches.
  - e. Minimum detail sheet size shall be 8-1/2 x 11-inches.
  - f. Minimum Scale:
    - (1) Assembly Drawings Sheet, Scale: 1-inch = 30 feet.
    - (2) Detail Sheet, Scale: 1/4-inch = 1 foot.
2. Product Data
- a. Product data includes standard printed information on materials, products and systems, not specially prepared for this Project, other than the designation of selections from among available choices printed therein.
  - b. Collect required data into one submittal for each unit of work or system, and mark each copy to show which choices and options are applicable to the Project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked and special coordination requirements.
3. Samples
- a. Samples include both fabricated and un-fabricated physical examples of materials, products and units of work, both as complete units and as smaller portions of units of work, either for limited visual inspection or, where indicated, for more detailed testing and analysis.
  - b. Provide units identical with final condition of proposed materials or products for the work. Include "range" samples, not less than three units, where unavoidable variations must be expected, and describe or identify variations between units of each set. Provide full set of optional samples where the ENGINEER'S selection is required. Prepare samples to match the ENGINEER'S sample where indicated. Include information with each sample to show generic description, source or product name and manufacturer, limitations and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture and "kind" by the ENGINEER. ENGINEER will note "test" samples, except as otherwise indicated, for other requirements, which are the exclusive responsibility of the CONTRACTOR.
4. Miscellaneous submittals related directly to the Work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, statements of applicability, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance

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Shop Drawings, Product Data and Samples

materials, overrun stock, security/protection/safety keys and similar information, devices and materials applicable to the Work but not processed as shop drawings, product data or samples.

## **1.2 SPECIFIC CATEGORY REQUIREMENTS**

- A. General: Except as otherwise indicated in the individual work sections, comply with general requirements specified herein for each indicated category of submittal. Submittals shall contain:
1. The date of submittal and the dates of any previous submittals.
  2. The Project title.
  3. Numerical submittal numbers, starting with 1.0, 2.0, etc. Revisions to be numbered 1.1, 1.2, etc.
  4. The Names of:
    - a. Contractor
    - b. Supplier
    - c. Manufacturer
  5. Identification of the product, with the Specification section number, permanent equipment tag numbers and applicable Drawing No.
  6. Field dimensions, clearly identified as such.
  7. Relation to adjacent or critical features of the Work or materials.
  8. Applicable standards, such as ASTM or Federal Specification numbers.
  9. Notification to the ENGINEER in writing, at time of submissions, of any deviations on the submittals from requirements of the Contract Documents.
  10. Identification of revisions on resubmittals.
  11. An 8 x 3-inch blank space for CONTRACTOR and ENGINEER stamps.
  12. CONTRACTOR'S stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria and coordination of the information within the submittal with requirements of the Work and of Contract Documents.
  13. Submittal sheets or drawings showing more than the particular item under consideration shall have all but the pertinent description of the item for which

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Shop Drawings, Product Data and Samples

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review is requested crossed out.

### **1.3 ROUTING OF SUBMITTALS**

A. Submittals and routine correspondence shall be routed as follows:

1. Supplier to CONTRACTOR (through representative if applicable)
2. CONTRACTOR to ENGINEER
3. ENGINEER to CONTRACTOR and OWNER
4. CONTRACTOR to Supplier

### **1.4 ADDRESS FOR COMMUNICATIONS**

Engineer: HMB Professional Engineers, Inc.  
3 HMB Circle  
Frankfort, KY 40601  
OFFICE (502) 695-9800  
FAX (502) 695-9810

## **PART 2 PRODUCTS**

### **2.1 SHOP DRAWINGS**

- A. Unless otherwise specifically directed by the ENGINEER, make all shop drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the Work.
- B. Submit all shop assembly drawings, larger than 11 x 17-inches, in the form of one reproducible transparency with two opaque prints or blueines.
- C. Submit all shop drawings, 11 x 17-inches and smaller, in the form of six opaque prints or blueines.
- D. One reproducible for all submittals larger than 11 x 17-inches and no more than three prints of other submittals will be returned to the CONTRACTOR.

### **2.2 MANUFACTURER'S LITERATURE**

- A. Where content of submitted literature from manufacturers includes data not pertinent to this submittal, clearly indicate which portion of the contents is being submitted for the ENGINEER'S review.
- B. Submit the number of copies which are required to be returned (not to exceed three)

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Shop Drawings, Product Data and Samples

plus three copies which will be retained by the ENGINEER.

## **2.3 SAMPLES**

- A. Samples shall illustrate materials, equipment or workmanship and established standards by which completed work is judged.
- B. Unless otherwise specifically directed by the ENGINEER, all samples shall be of the precise article proposed to be furnished.
- C. Submit all samples in the quantity which is required to be returned plus one sample which will be retained by the ENGINEER.

## **2.4 COLORS**

- A. Unless the precise color and pattern is specifically described in the Contract Documents, wherever a choice of color or pattern is available in a specified product, submit accurate color charts and pattern charts to the ENGINEER for review and selection.
- B. Unless all available colors and patterns have identical costs and identical wearing capabilities, and are identically suited to the installation, completely describe the relative costs and capabilities of each.

# **PART 3 EXECUTION**

## **3.1 CONTRACTOR'S COORDINATION OF SUBMITTALS**

- A. Prior to submittal for the ENGINEER'S review, the CONTRACTOR shall use all means necessary to fully coordinate all material, including the following procedures:
  - 1. Determine and verify all field dimensions and conditions, catalog numbers and similar data.
  - 2. Coordinate as required with all trades and all public agencies involved.
  - 3. Submit a written statement of review and compliance with the requirements of all applicable technical Specifications as well as the requirements of this Section.
  - 4. Clearly indicate in a letter or memorandum on the manufacturer's or fabricator's letterhead, **all deviations** from the Contract Documents.
- B. Each and every copy of the shop drawings and data shall bear the CONTRACTOR'S stamp showing that they have been so checked. Shop drawings submitted to the ENGINEER without the CONTRACTOR'S stamp will be returned to the

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Shop Drawings, Product Data and Samples

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CONTRACTOR for conformance with this requirement.

- C. The Owner may backcharge the CONTRACTOR for costs associated with having to review a particular shop drawing, product data or sample more than two times to receive a "No Exceptions Taken" mark.
- D. Grouping of Submittals
  - 1. Unless otherwise specifically permitted by the ENGINEER, make all submittals in groups containing all associated items.
  - 2. No review will be given to partial submittals of shop drawings for items which interconnect and/or are interdependent. It is the CONTRACTOR'S responsibility to assemble the shop drawings for all such interconnecting and/or interdependent items, check them and then make one submittal to the ENGINEER along with CONTRACTOR'S comments as to compliance, non-compliance or features requiring special attention.
- E. Schedule of Submittals: Within 30 days of Contract award and prior to any shop drawing submittal, the CONTRACTOR shall submit a schedule showing the estimated date of submittal and the desired approval date for each shop drawing anticipated. A reasonable period shall be scheduled for review and comments. Time lost due to unacceptable submittals shall be the CONTRACTOR'S responsibility and some time allowance for resubmittal shall be provided. The schedule shall provide for submittal of items which relate to one another to be submitted concurrently.

### **3.2 TIMING OF SUBMITTALS**

- A. Make all submittals far enough in advance of scheduled dates for installation to provide all required time for reviews, for securing necessary approvals, for possible revision and resubmittal, and for placing orders and securing delivery.
- B. In scheduling, allow sufficient time for the ENGINEER'S review following the receipt of the submittal.

### **3.3 REVIEWED SHOP DRAWINGS**

- A. ENGINEER Review
  - 1. Allow a minimum of 14 days for the ENGINEER'S initial processing of each submittal requiring review and response, except allow longer periods where processing must be delayed for coordination with subsequent submittals. The ENGINEER will advise the CONTRACTOR promptly when it is determined that a submittal being processed must be delayed for coordination. Allow a minimum of two weeks for reprocessing each submittal. Advise the ENGINEER on each submittal as to whether processing time is critical to progress of the Work, and therefore the Work would be expedited if processing time could be foreshortened.

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Shop Drawings, Product Data and Samples

2. Acceptable submittals will be marked "No Exceptions Taken". A minimum of three copies will be retained by the ENGINEER for ENGINEER'S and the OWNER'S use and the remaining copies will be returned to the CONTRACTOR.
  3. Submittals requiring minor corrections before the product is acceptable will be marked "Make Corrections Noted". The CONTRACTOR may order, fabricate and ship the items included in the submittals, provided the indicated corrections are made. Drawings must be resubmitted for review and marked "No Exceptions Taken" prior to installation or use of products.
  4. Submittals marked "Amend and Resubmit" must be revised to reflect required changes and the initial review procedure repeated.
  5. The "Rejected - See Remarks" notation is used to indicate products which are not acceptable. Upon return of a submittal so marked, the CONTRACTOR shall repeat the initial review procedure utilizing acceptable products.
  6. Only two copies of items marked "Amend and Resubmit" and "Rejected - See Remarks" will be reviewed and marked. One copy will be retained by the ENGINEER and the other copy with all remaining unmarked copies will be returned to the CONTRACTOR for resubmittal.
- B. No work or products shall be installed without a drawing or submittal bearing the "No Exceptions Taken" notation. The CONTRACTOR shall maintain at the job site a complete set of shop drawings bearing the ENGINEER'S stamp.
- C. Substitutions: In the event the CONTRACTOR obtains the ENGINEER'S approval for the use of products other than those which are listed first in the Contract Documents, the CONTRACTOR shall, at the CONTRACTOR'S own expense and using methods approved by the ENGINEER, make any changes to structures, piping and electrical work that may be necessary to accommodate these products.
- D. Use of the "No Exceptions Taken" notation on shop drawings or other submittals is general and shall not relieve the CONTRACTOR of the responsibility of furnishing products of the proper dimension, size, quality, quantity, materials and all performance characteristics, to efficiently perform the requirements and intent of the Contract Documents. The ENGINEER'S review shall not relieve the CONTRACTOR of responsibility for errors of any kind on the shop drawings. Review is intended only to assure conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The CONTRACTOR is responsible for dimensions to be confirmed and correlated at the job site. The CONTRACTOR is also responsible for information that pertains solely to the fabrication processes or to the technique of construction and for the coordination of the work of all trades.

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Shop Drawings, Product Data and Samples

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### **3.4 RESUBMISSION REQUIREMENTS**

#### **A. Shop Drawings**

1. Revise initial drawings as required and resubmit as specified for initial submittal, with the resubmittal number shown.
2. Indicate on drawings all changes which have been made other than those requested by the ENGINEER.

#### **B. Project Data and Samples: Resubmit new data and samples as specified for initial submittal, with the resubmittal number shown.**

END OF SECTION

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## **SECTION 02010**

### **Subsurface Conditions**

#### **PART 1 GENERAL**

##### **1.1 DESCRIPTION**

- A. Investigation: The CONTRACTOR shall visit the site and become acquainted with site conditions. Prior to bidding, prospective CONTRACTORS may make their own site and subsurface investigations to satisfy themselves with site and subsurface conditions. The CONTRACTOR shall be responsible for obtaining rights of ingress and egress to private property for site and subsurface investigation and shall assume all responsibility for any damage to property caused as a result of the CONTRACTOR's investigation.
- B. No geotechnical investigation has been performed on this site for the utilities. The CONTRACTOR is responsible for making their own determination of subsurface conditions.

END OF SECTION



SECTION 02255

Crushed Stone and Dense Graded Aggregate

PART 1

GENERAL

1.1

SCOPE

- A. Furnish and install crushed stone for miscellaneous uses as shown on the Drawings, as called for in the Specifications.
- B. Sizes, types, and quality of crushed stone are specified in this Section, but its use for replacement of unsuitable material, pavement base, and similar uses is specified in detail elsewhere in the Specifications. The ENGINEER may order the use of crushed stone for purposes other than those specified in other sections, if, in his opinion, such use is advisable. Payment for same will be subject to negotiation.

PART 2

PRODUCTS

2.1

MATERIALS

- A. When referred to in these Specifications, crushed stone shall be Number 57 graded in accordance with the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Latest Edition, unless otherwise noted.
- B. When referred to in these Specifications, dense graded aggregate (DGA) shall be crushed stone classified by the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Latest Edition, and conforming to the following requirements:

| <u>Sieve Size</u> | <u>Percent Passing</u> |
|-------------------|------------------------|
| 1 inch            | 100                    |
| 3/4 inch          | 70-100                 |
| 3/8 inch          | 50-80                  |
| #4                | 35-65                  |
| #10               | 25-50                  |
| #40               | 15-30                  |
| #200              | 5-12                   |

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Crushed Stone and Dense Graded Aggregate

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Crushed stone shall be placed in uniform layers not greater than 6 inches deep and shaped by power equipment to required lines, grades, cross sections, and depths. No minimum compacted density, method of compaction, or compaction equipment is required since a nominal amount of compaction effort with vibration can establish the desired intergranular locking of the aggregate under controlled placement depth. Acceptable compaction can be achieved with pneumatic-tired and tracked equipment and rollers.
- B. All compaction operation shall be performed to the satisfaction of the ENGINEER.
- C. Crushed stone shall be placed in those areas as shown on the Drawings, as may be directed by the ENGINEER and as required by the Contract Documents.

END OF SECTION

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## **SECTION 02735**

### **SANITARY SEWER FORCE MAIN**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. This Section includes sanitary sewerage system piping and appurtenances, including but not limited to, the following:
  - 1. Sewer Mains.
  - 2. Service Laterals.
  - 3. Force Main Appurtenances.

##### **1.2 SUBMITTALS**

- A. Submit in accordance with Section 01300.
- B. As-Built Drawings: Contractor responsible for preparing and submitting as-built drawings if required by the utility having jurisdiction.
- C. Product data for drainage piping specialties.
- D. Shop drawings for pre-cast concrete sanitary manholes, including frames and covers.

##### **1.3 QUALITY ASSURANCE**

- A. Environmental Compliance: Comply with applicable portions of local environmental agency regulations pertaining to sanitary sewerage systems.
- B. Utility Compliance: Comply with local utility regulations and standards pertaining to sanitary sewerage systems.
- C. Unless otherwise instructed, Work is to be observed by the Architect/Engineer; and tests and inspection work are to meet his approval at each stage before backfilling. When public authorities require inspection and approval by them or their supervision of the Work is required, their requirements shall be complied with. Any Work covered before inspection and approval shall be re-excavated and the cost borne by the Contractor responsible for covering the Work.
- D. Install pipe and fittings in strict accordance with best, acceptable practice to insure proper functioning, freedom from trouble, and neatness of appearance.
- E. Provide proper fittings for the installation of, and connection to, sewer lines. Where an underground branch connection is required, provide a "Y" branch and 30 degree curve type fitting. Connections made by cutting holes in pipe will not be permitted.

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Sanitary Sewer Force Main

- F. Prior to final inspection flush sewers with water in sufficient volume to obtain free flow through each line. Remove all obstructions and correct defects discovered.

#### **1.4 PROJECT CONDITIONS**

- A. Site Information: Perform site survey, research public utility records, and verify existing utility locations. Verify that storm sewerage system piping may be installed in compliance with original design and referenced standards.

- 1. Locate existing sanitary sewerage system piping and structures that are to be abandoned and closed.
- 2. When existing sewers are encountered, whether indicated on the Drawings or not, adequate provisions shall be made for diverting the flow of such existing sewers so that the excavation will be kept dry during the progress of construction. Reroute such existing sewers as required to maintain proper functioning. Before completion of the construction work, the existing sewers shall be restored as called for on the Drawings, or otherwise provide with an adequate outlet, as directed by the Architect. Under no conditions shall underground lines be abandoned or plugged until sufficient tests have been made to indicate that it is not a functioning line, and then only when so directed by the Architect/Engineer in writing.

- B. Public Rights-of-Way

- 1. Sewers to be installed in public rights-of-way, including rights-of-way that are to be dedicated to public use, shall be constructed in strict accordance with standards and methods established by the public authority having jurisdiction over same, and requirements of their specifications shall be complied with. Other Work occurring on the Owner's property or adjacent property within contract limits shall be installed in accordance with the requirements of this Section.

- C. Relationship to Water Lines

- 1. Low pressure sewers crossing water mains shall be laid under the water main to provide a vertical distance of 18 inches between the outside of the water main and the outside of the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints.
- 2. Low pressure sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge.

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Sanitary Sewer Force Main

D. Protection of Existing Improvements

1. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements indicated to remain in place.
2. Protect improvements on adjoining properties as well as those on the Owner's property.
3. Restore improvements damaged by this Work to their original condition, as acceptable to the Owner or other parties or authorities having jurisdiction.

E. Protection of Existing Trees and Vegetation

1. Protect existing trees and other vegetation indicated to remain in place against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip lien, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary fences, barricades, or guards required to protect trees and vegetation to be left standing.

**1.5 SEQUENCING AND SCHEDULING**

- A. Coordinate connection to public sewer with utility company.
- B. Coordinate with interior building sanitary drainage piping.
- C. Coordinate with other utility work.

**PART 2 PRODUCTS**

**2.1 SERVICE LATERALS**

- A. The Contractor shall provide all labor, tools, equipment and materials to furnish and install the service laterals as shown on Plans and Specifications as directed by the Owner. This shall include furnishing and installing the curb shut off.
- B. Under these items, the CONTRACTOR shall provide all labor, tools, equipment and materials to furnish and install the force mains as shown on PLANS and as directed.
- C. All pipe materials listed below shall conform to manufacturer's standard lengths and diameters. Testing when required by the owner shall be done in accordance with the appropriate ASTM Specs for the material selected.
- D. Pipe joints shall be mechanical joint, rubber ring slip joint, flanged, or locked mechanical joint equal to AWWA C-111.

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Sanitary Sewer Force Main

1. Polyethylene HDPE Pipe

The polyethylene base resin shall meet requirements of ASTM D-1248 for Type III Grade P34, Category 5 and has a PPI rating of PE 3408 by the plastic pipe institute.

The pipe and fittings produced from this resin shall have a cell classification of PE 345434C under ASTM D-3350 and meet or exceed all the requirements.

All pipe shall meet AWWA C906 standards and shall be clearly marked on each joint of pipe. A green stripe or lettering shall be on the pipe to identify as sewer line.

High density polyethylene pipe shall be joined by means of a butt fusion as per manufacturer's recommendations.

2. Fittings

PE (fused or flanged) fittings shall be used with pipe. All such fittings shall be approved by the PE pipe manufacturer, and complete data sent to the ENGINEER, including the manufacturer's approval, for review. Fittings comply with shall be manufactured for the size and pressure class of the line on which they are used.

3. Pipe Handling

Pipe delivered to site in general, will be stored, handled, distributed, placed, joined together, etc. in accordance with the Manufacturer's recommendation unless instructed otherwise by these specifications or by the ENGINEER.

**2.2 FORCE MAIN APPURTENANCES:**

**A. POLYVINYL CHLORIDE SEWER PIPE AND PIPE JOINTS**

1. Polyvinyl chloride (PVC) sewer pipe furnished and installed on this project shall be in conformance with the requirements of ASTM Specification D3034 for SDR21 pipe. Laying lengths shall be regular commercial lengths not to exceed twenty (20) feet.
2. All PVC pipe shipped to the project shall bear the mark of an approved testing laboratory showing that such pipe was tested and approved by the testing laboratory at the site of the manufacturer's plant. Testing of PVC pipe

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Sanitary Sewer Force Main

shall conform to ASTM D3034. Certified test reports shall be furnished to the Engineer.

3. The jointing material furnished and installed on this Project for use on PVC sewer pipe shall be flexible, elastomeric type, push-on-joints conforming to the requirements of ASTM D3212. These joints shall be field assembled in conformance with the manufacturer's recommendation.

B. GATE VALVES

All gate valves shall be the resilient seat-type, iron body, non-rising stem, fully bronze mounted, and suitable for working water flanged pressures of not less than 200 psi for installations on PVC pipe and not less than 250 psi for installations on DI pipe. Valves shall be of standard manufacture and of the highest quality both of materials and workmanship and shall conform to the latest revision of AWWA Specification C-509. Valves shall be furnished with flanged connections for exposed piping and push-on or mechanical joint connections for buried service. Gate valves shall have a clear water way equal to the nominal diameter, and shall be opened by turning counter-clockwise. The operating nut or wheel shall have an arrow cast in the middle, indicating the direction of opening. Each valve shall have the maker's initials, pressure rating and the year in which manufactured, cast on the body. Prior to shipment from the factory each valve shall be tested by hydraulic pressure of at least 300 pounds per square inch.

Underground valves shall be nut operated, unless otherwise shown on the plans. Valve supplier shall furnish two standard stem iron wrenches for turning nut operated valves. All underground valves which have nuts deeper than 30 inches below the top of valve box shall have extended stems with nuts located within 2 feet of valve box cap. Buried service valves shall have either epoxy-coated or tar-coated exteriors.

Exposed service valves shall be equipped with an AWWA approved handwheel operator. The exterior of exposed valves shall be epoxy-coated, tar-coated, or as specified on the DRAWINGS.

C. CHECK VALVES

Check valves shall be iron body, flanged, bronze mounted, full opening, swing type with bolted covers and flanged ends. Materials shall meet all requirements of AWWA C508-82 and flanges shall meet all requirements of ANSI B16.1 Class 125.

Check valves shall be designed for buried service, have mechanical joint ends, have all exterior surfaces shop painted with two coats of Fed. Spec. TTV-51F Asphalt

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varnish. Check valves shall be manufactured by American Darling, or approved equivalent.

D. FLAP VALVES

Flap valves shall be flanged (or other suitable connections for headwall mounting), iron body, bronze mounted.

E. AIR/VACUUM VALVES

Valves shall be 2-inch size.

F. VALVE BOXES

Valve boxes shall be of 5-1/4 inch standard cast iron, two-piece, screw type valve box with drop cover marked "SEWER". Valve boxes shall be accurately centered over valve operating nut, and backfill thoroughly tamped about them. Valve box bases shall not rest on the valves but shall be supported on crushed stone fill. They shall be set vertically and properly cut and/or adjusted so that the tops of boxes will be at grade in any paving, walk or road surface, and 2 to 3 inches above ground in grass plots, fields, wood or other open terrain. In grass areas, provide concrete pad around valve box; slightly crown in all directions to shed water.

G. IN-LINE CLEANOUT

In-line cleanout shall include the complete assembly of two 3-inch m.j. x flange gate valve with adjustable valve box, 3 inch ductile iron flanged pipe from the gate valve to the hose nozzle, hose nozzles with caps and chains, 3-inch PVC, SDR-21 pipe and fittings from the main to the gate valves. A gate valve sized to the force main with an adjustable valve box shall be included in the bid price for cleanouts. The manhole shall be 18-inch HDPE, Model N-12 manufactured by Advanced Drainage Systems, or approved equivalent when placed out side of right-of-way. The manhole shall be 18-inch concrete meter vault when placed in right-of-way or in a drive.

H. END-LINE CLEANOUT

End-line cleanouts shall include a single 3-inch m.j. x flanged gate valve with adjustable valve box, 3-inch ductile iron flanged pipe from plug valve to the hose nozzle, hose nozzle, hose nozzle with cap and chain, 3-inch PVC, SDR-21 pipe fittings from the main to the gate valve. A plug valve sized to the force main shall be included in the bid price for cleanouts. The manhole shall be 18-inch HDPE, model N-12 manufactured by Advanced Drainage Systems, or approved equivalent when placed out side of right-of-way. The manhole shall be 18-inch concrete meter vault when placed in right-of-way or in a drive



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## **2.3 IDENTIFICATION**

- A. Plastic Underground Warning Tapes: Polyethylene plastic tape, 6 inches wide by 4 mils thick, solid green in color with continuously printed caption in black letters "CAUTION - SEWER LINE BURIED BELOW."

## **PART 3 EXECUTION**

### **3.1 PREPARATION OF FOUNDATION FOR BURIED SANITARY SEWERAGE SYSTEMS**

- A. Grade trench bottom to provide a smooth, firm, stable, and rock-free foundation, throughout the length of the pipe.
- B. Remove unstable, soft, and unsuitable materials at the surface upon which pipes are to be laid, and backfill with clean sand or pea gravel to indicated level.
- C. Shape bottom of trench to fit bottom of pipe. Fill unevenness with tamped sand backfill. Dig bell holes at each pipe joint to relieve the bells of all loads and to ensure continuous bearing of the pipe barrel on the foundation.

### **3.2 INSTALLATION, GENERAL**

- A. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of the underground sanitary sewerage system piping. Location and arrangement of piping layout take into account many design considerations. Install the piping as indicated, to the extent practical.
- B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's recommendations for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line and pull past each joint as it is completed.
- C. Use fittings for branch connections, except where direct tap into existing sewer is indicated.

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- D. Use proper size increasers, reducers, and couplings, where different size or material of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.
- E. Install piping with adequate coverage. The minimum distance between top of the pipe and the finished grade shall be 30 inches.
- F. Extend sanitary sewerage system piping to connect to building sanitary drains, of sizes and in locations indicated.
- G. Install 1-inch-thick extruded polystyrene over underground building drain piping not under building. Width of insulation shall extend minimum of 12 inches beyond each side of pipe. Install directly over and center on pipe center line.
- H. Tunneling: Install pipe under streets or other obstructions that cannot be disturbed, by tunneling, jacking, or a combination of both.
- I. Excavating, trenching, backfilling, grading, and related work shall follow the Specifications outlined in Section 02200, and as hereinafter so noted.
- J. Care shall be exercised in trenching, preparation of the bedding, and installation of the piping materials so that the pipe will be held in a straight line, conforming to the gradients called for on the Drawings.
- K. Make sure pipe is properly mated and sealed as it is installed.
- L. A dry trench shall be maintained to avoid sediment entry into the system and so that a firm and secure bed will be achieved. Joint work shall also be protected as the Work progresses. When required, perform piping and bailing so this requirement may be met.
- M. A properly designed stopped shall be placed in the open end of each pipe line when laying is not in progress. Where "Y" branches are installed, they shall be located as close as possible to the points shown on the Drawings. Place secure, temporary caps or plugs in branch openings, pending the installation of branch sewers.

### 3.3

#### LAYOUT

- A. The Work under this Section shall include the making of a complete layout on the site of sanitary force mains & force main appurtenances, in accordance with the design drawings. This layout shall be carefully checked against the finished grades and other improvements called for on the Drawings. Conflication or deviation from drawing requirements shall be called to the Architect's attention for instructions before proceeding with the Work. Perform layout in cooperation with other

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Contractors in establishing the exact routing, crossings, and points of connection with the Work of other Contractors.

- B. Verify the location, as close as possible, of existing and new utilities prior to excavation. The utmost care shall be exercised to avoid contact and injury to electrical underground cables and underground utilities. Proper protection of said devices must be maintained.
- C. Sizes indicated on accompanying Drawings and as specified refer to nominal inside diameter of the pipe, unless otherwise indicated.

### 3.4 ROAD CROSSINGS

In all cases, these crossings will be made in compliance with the requirements of the State Highway Department or the appropriate county or city office. State requirements will normally be described by the appropriate District Highway Office. In general, unless otherwise shown on the plans or directed otherwise by the ENGINEER, the crossing of all State Highways shall be accomplished by boring and jacking a casing pipe under said roadway. In certain cases, as shown on the plans, service lines of all sizes will require casing pipe installed with the crossing.

#### A. GENERAL

This section will describe the requirements for crossing any roadway during the construction of water or sewer lines.

Under state roads, requirements of the Kentucky Department of Transportation shall apply. Unless stated otherwise by the ENGINEER, all pipe crossing a state road shall be cased with casing pipe and bored under the road. Pipe crossing under county roads or city streets shall be cased with casing pipe, and crossed in the manner as directed on the plans.

The proper placement and maintenance of traffic control devices and the maintenance of traffic flows shall comply with the standards set forth in the Special Conditions.

#### B. CASING PIPE

In general, the diameter, thickness, style, joints and materials selected for casing pipe shall be as shown on the plans or as specified herein and shall be considered as "minimum" requirements, all subject to prior approval of the ENGINEER. In all cases, the approval for construction by agreement with the private company and/or

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construction permit issued by the State, County, or Municipal agency will be required before constriction starts.

Steel casing pipe for road and railroad crossings using the boring and jacking method shall be steel, plain end, uncoated and unwrapped, and shall be furnished in at least 18 foot lengths. Steel pipe shall meet the requirements of ASTM Specification A-120 and AWWA C200. Pipes up to and including 4 inches in diameter shall be Schedule 40. Pipe larger than 4 inches and less than 18 inches shall have a wall thickness equal to or greater than 0.312 inches under railroads and 0.250 for all other uses. Pipe larger than 18 inches under roads shall have a wall thickness as indicated in the table below.

| <u>Minimum<br/>Thickness (Inches)</u> | <u>Nominal<br/>Diameter (Inches)</u> |
|---------------------------------------|--------------------------------------|
| use Schedule 40                       | less than 4                          |
| 0.250                                 | 4 thru 18                            |
| 0.281                                 | 20                                   |
| 0.312                                 | 22                                   |
| 0.344                                 | 24                                   |
| 0.375                                 | 26                                   |
| 0.406                                 | 28 thru 30                           |
| 0.438                                 | 32                                   |
| 0.469                                 | 34 thru 36                           |
| 0.500                                 | 38 thru 42                           |

The inside diameter of all casing pipes shall be a minimum of four (4") inches greater than the largest outside diameter of the carrier pipe, joint or coupling. The pipe shall be steel, new material, with a minimum yield of 35,000 psi. The steel casing pipe shall be bored and/or jacked in place at the locations as shown on the plans or as directed by the ENGINEER. All joints between lengths shall be solidly welded with a smooth non-obstructing joint inside. Any field welding shall be performed by a certified welder and shall be in accordance with AWWA C206. The casing pipe may be extended beyond the boring limits by open trenching as shown in the Standard Details. This would apply when the casing is required from right-of-way or ditch line to ditch line. Open trenching at jack or bored locations will be allowed no closer than 3 feet from the edge of pavement or toe of the slope embankment.

Positioning guides (insulators) shall be utilized on all carrier pipe which is within the casing pipe. Positioning shall be accomplished by the use of prebuilt spacers such as those manufactured by CALPICO or an approved equal. The CONTRACTOR shall submit the type of position guide proposed for use for approval of the ENGINEER. Spacing of the positioning guides shall be in accordance with the Standard Drawings. The carrier pipe shall not be permitted to

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rest on bells or couplings. The spacers shall be sized to fit the carrier pipe and the walls of the encasement pipe.

The ends of the casing pipe shall be plugged and made watertight in a manner acceptable to the ENGINEER prior to backfilling. Casing seals as manufactured by Pipeline Seal & Insulators, Inc. (PSI), Advance Product & Systems, Inc. (APS) or equal shall be used.

Where road crossings are made using plastic pipe or copper, the location of joints under the roadway should be avoided by using lengths of adequate dimension for the crossing. This principle also applies to other types of pipe where sufficiently long lengths are available.

C. OPEN TRENCH CROSSING

The trench shall be excavated to a minimum width that will allow the pipe installation. The trench walls shall be kept as nearly vertical as possible. The minimum specified cover above the pipe shall be maintained. The Standard Details section shows the requirements for open trench crossings.

The backfill in the trench under any paved roads, driveways, or parking areas where the open trench method is used shall be completely backfilled with #57 stone or approved equal to minimize settlement and maintain traffic until replacement of paving is accomplished.

The surface of the road, driveway, or parking area shall be replaced with the same type of material as specified under pavement replacement.

D. BORING AND JACKING

The work is herein defined as the operations in which both the boring by auger and the jacking of the casing pipe are done mechanically and in which the diameter of the casing pipe is too small to permit hand working at the heading of the casing pipe.

Two basic methods are: (1) pushing the casing pipe into the fill or earth simultaneously as the boring auger drills out the ground and (2) drilling the hole through the fill or earth and pushing the casing or carrying pipe into the hole after the drill auger has completed the bore.

A suitable approach trench shall be opened adjacent to the slope of the embankment, or adjacent to point of bored and jacked section as shown on the plans. The approach trench shall be long enough to accommodate the selected working room.

Guide timbers or rails for keeping the casing pipe on line and grade shall be accurately set and maintained in the bottom of the approach trench and with heavy timber back-stop supports installed at the rear of the approach trench to adequately

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take thrust of the jacks without any movement or distortion. It is paramount to the securing of acceptable tolerance limits of workmanship in the boring and jacking operation that extreme care be taken in the setting of all guides, rails and jacks to the end that the casing pipe in final position be within the limits of acceptability for the placing and laying of the carrier pipe. The minimum cover of 36 inches under the roadway must be maintained. Additional depth may be required as shown on the plans.

**3.5 CLEANOUTS (N/A)**

- A. Install cleanouts and extension from sewer pipe to cleanout as shown in detail drawings. Cleanouts should be installed at the terminal end of each main, every 1000 feet on straight runs of pipe, and whenever two or more mains come together and feed into another main. The cleanout manhole shall be 18-inch HDPE covered with precast frame and solid lid. Set top of cleanout 1 inch above surrounding earth grade or flush with grade when installed in paving.

**3.6 AIR/VACUUM VALVES**

Installation shall include the complete assembly with pre-cast manhole frame lid, shut-off valve, piping, fittings, and unions, all complete and ready for operation in general conformance with the drawings contained elsewhere in these specifications. Work in and around the manhole will be done in a workmanlike manner leaving the top of the manhole one inch above the original ground surface.

**3. INSTALLATION OF IDENTIFICATION**

- A. Install continuous plastic underground warning tape during back-filling of trench for underground water service piping. Locate 6 to 8 inches below finished grade, directly over piping.

**3. FIELD QUALITY CONTROL**

- A. Testing: Perform testing of completed piping in accordance with local authorities having jurisdiction.

The force main and appurtenances, as rapidly as valves are installed, shall be tested to the pressure rating of the pipe, or as directed by the ENGINEER, at point of maximum pressure. Defective joints of pipe shall be cut out and replaced as directed by the ENGINEER. Cracked or defective pipe fittings, valves or hydrants disclosed in the pressure test shall be replaced by the CONTRACTOR with sound material, and the test shall be repeated until the test results are satisfactory to the ENGINEER.

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Test the pipeline at 50 psi above the rated working pressure measured at the lowest point for at least two hours. Maintain the test pressure within 5 psi of the specified test pressure for the test duration. Should the pressure drop more than 5 psi at any time during the test period, the pressure shall be restored to the specified test pressure. Provide an accurate pressure gage with graduation not greater than 5 psi.

1. Air Removal: Before applying the specified test pressure, air shall be expelled completely from the pipe, valves, and hydrants. Of permanent air vents are not located at all high points, the CONTRACTOR shall install corporation cocks at such points so that the air can be expelled as the line is filled with water. After all the air has been expelled, the corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged or left in place at the discretion of the Owner.
2. Leakage Defined: Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe or any valved section thereof to maintain pressure within 5 psi of the specified test pressure after the pipe has been filled with water and the air has been expelled. Leakage shall not be measured by a drop in pressure in a test section over a period of time.
3. Allowable Leakage: No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{SD (SQ. ROOT (P))}{133,200}$$

Where:

L = allowable leakage, in gallons per hour

S = length of pipe tested, in feet

D = nominal diameter of the pipe, in inches

P = average test pressure during the leakage test, in pound per square inch (gauge)

As determined under Section 4 of AWWA C600.

If the main section being tested contains lengths of various pipe diameters, the allowable leakage shall be the sum of the computed leakage for each diameter. The leakage test shall be repeated until

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the test section is accepted. All visible leaks shall be repaired regardless of leakage test results.

END OF SECTION



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## SECTION 02933

### Seeding

## PART 1 GENERAL

### 1.1 SCOPE

- A. The work covered by this section shall include the establishment of all ground cover including areas to be seeded and sodded. This work shall include the supply of all materials, labor, superintendence and maintenance as outlined in these specifications.
- B. The part of the site not covered by roads, walks, building, etc. shall be seeded according to these specifications. The areas to be sodded shall include a three foot strip immediately adjacent to all roads, walks, and structures, etc.
- C. Before final acceptance of the work, the CONTRACTOR shall satisfactorily clean all areas within the limits of his operations including the street surfaces, walks, gutters, fences, lawns, private property and structures, leaving them in as neat, clean and usable condition as originally found. He shall remove all machinery, tools, surplus materials, temporary buildings and other structures from the site of work. He shall so remove all organic matter and materials containing organic matter from all areas and places used by him during construction. All sewers, manholes, inlets, etc., shall be cleared of all scaffolding, sedimentation, debris, rubbish and dirt.

Where the CONTRACTOR's operations have resulted in filling existing ditches, clogging existing culverts, damaging existing bridges, ground surfaces, sidewalks, driveways, etc., the Contract shall reditch, clean culverts, repair or replace bridges, ground surfaces, sidewalks, driveways, etc., so as to return them to a condition as good as or better than existed prior to the beginning of his operations.

The CONTRACTOR's cleanup operations, which include repair, restoration or replacement of ground surfaces and existing improvements and the removal of rock, shall be performed continuously during the construction operations.

Following installation of the pipeline, "rough cleanup" work shall be performed. This shall consist of grading the trench to create a neat, low mound of backfill material and disposing of any excavated material, rubbish, etc. Crushed stone shall be added to driveways where necessary and fences repaired to the satisfaction of the property owners. After trenches have had adequate time to settle, final grade work and seeding shall be performed.

Rough Grade Work and Cleanup (Rough Cleanup) shall be defined to include the final backfill and windrowing of the ditch line, filling and leveling street and driveway cuts, cleaning up and removal of rubbish, repair of fences and structures,

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and any other such work that may be required to result in a neat, orderly project area. Rough Cleanup shall be performed as other construction progresses and must be completed immediately after the adjacent pipeline construction.

Rough Cleanup is not a separate pay item. The cost for this work shall be included in the unit bid price for waterlines. If Rough Cleanup is not performed as specified, the OWNER will require deductions from partial payment estimates.

Final cleanup, grade work and seeding shall be performed on each line when backfilled trenches have had adequate time to settle, but at least within 2 months from the date each line is constructed. Final grade work and seeding on Kentucky Bureau of Highways rights-of-way shall be done in accordance with said Bureau's specifications and the permit granted to the OWNER specifically for this project.

Where work was performed on private property in lawns, earth of good quality, free from rock shall be spread over the disturbed area and graded and compacted to match adjacent ground contours. The graded area shall be hand raked until smooth and free from rock, potholes, and humps. The disturbed area shall then be seeded with the seed variety used on the original lawn (e.g., a bluegrass lawn shall be reseeded with bluegrass seed) and the seed raked in lightly. The seeded area shall be fertilized and then uniformly covered with straw to a depth of approximately 1-1/2 inches.

Where work was performed on private property and not in lawns the trench line shall be graded and filled if necessary to match adjacent contours. All rock larger than 1-1/2" in diameter shall be removed from the disturbed area. In general, pasture and fallow land shall be fertilized and seeded with Kentucky 31 Fescue and plowed fields shall be left unseeded, however, the desire of each property owner shall govern regarding seeding.

In all cases on private property the rate of seed and fertilizer application shall be that recommended by the University of Kentucky Cooperative Extension Service for new plantings of the variety of grass seed used.

If the trench line settles following final grade work or if grass seed fails to germinate within a reasonable time, the CONTRACTOR shall regrade or reseed the area in question as specified above and as directed by the ENGINEER.

The OWNER reserves the right to require the CONTRACTOR to obtain a signed Release from each property owner affected by the work. Said Release shall indicate that the property owner is satisfied with the restoration of his land. However, the execution of such a release shall not relieve the CONTRACTOR from any of his contractual obligations or other claims that may arise at a later date. The widths of construction easements obtained by the OWNER from

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property owners is normally 20 feet and the CONTRACTOR shall confine his activities to the area within the limits of the easements unless specific permission is obtained by the CONTRACTOR from property owners.

## **PART 2 PRODUCTS**

### **2.1 LIME**

- A. Agriculture lime shall be spread over the entire area to be planted at an average rate of one (1) ton per acre. One tillage operation shall incorporate both the lime and the fertilizer into the soil to a depth of four inches (4").

### **2.2 FERTILIZER**

- A. Two fertilizer materials shall be applied to all areas to be seeded. The first shall be complete commercial fertilizer with 1:2:2 ratio of nitrogen, phosphorus, and potassium. Eight hundred pounds (800 lbs) per acre of a 6-12-12 fertilizer, or equivalent amount of another 1:2:2 ratio fertilizer shall be used.
- B. In addition to a complete fertilizer, a slowly available nitrogen fertilizer shall be applied. Two hundred fifty pounds (250 lbs.) per acre of area formaldehyde (38-0-0) shall be used.
- C. Both fertilizer materials shall be free flowing and suitable for application with approved equipment. Each material shall conform to State fertilizer laws. Bagged fertilizer shall be delivered in sealed standard containers and shall bear the name, trademark, and warranty of the producer. The fertilizers shall be incorporated into the surface four inches (4") by tillage.

### **2.3 SEED**

- A. Grass seed shall be fresh, clean and new crop seed composed of the following varieties mixed in the proportion by weight as shown and shall be certified as to varietal purity. All seed shall be mixed by a dealer furnished in sealed standard containers, and tagged with the dealer's guaranteed statement of composition of mixture and percentage of purity and germination. All areas disturbed by construction activity shall be seeded within the following blend at a rate of two hundred pounds (200 lbs.) per acre (4.6 pounds per 1000 square feet).
- B. The quality of seed shall conform to or exceed the minimum requirement for seed quality of the Kentucky Seed Improvement Association and shall meet or exceed the following standards for purity and germination:

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| Variety                      | Min%<br>Purity/Germ | Seeding Rate |                 |
|------------------------------|---------------------|--------------|-----------------|
|                              |                     | Wt.%         | Pounds Per Acre |
| Kentucky Bluegrass-Kenblue   | 98/80               | 20           | 40              |
| Creeping Red Fescue-Pennlawn | 98/85               | 70           | 140             |
| Perennial Ryegrass           | 95/90               | 10           | 20              |

**2.4 MULCH**

- A. Mulch for hydroseeding shall be natural wood cellulose fiber or wood pulp which disperses readily in water and which has no toxic effect when combined with seed or other materials. It shall be a commercially available product made for use in spray applicators. Wood cellulose mulch shall be applied at a rate of 1000 lbs. per acre when work is done in the spring or fall season as defined below and 1500 pounds per acre when work is done during summer months.

**2.5 SOD**

- A. Sod shall be bluegrass sod strongly rooted and free of pernicious weeds. It shall be a uniform thickness of not more than 1 1/2" and shall have not less than 3/4" of soil. All sod shall be grown on a commercial turf farm and no pasture sod shall be acceptable. The source of the sod must be approved by the Engineer before it is cut for delivery.

**PART 3 EXECUTION**

**3.1 PLANTING SEASON**

- A. The normal seasonal dates for seeding mixtures containing Kentucky Bluegrass or tall fescue shall be August 15 to October 15 and from the time the soil is workable in the spring to May 1. Seeding of a specified grass variety at times other than the normal seasonal dates must be approved by the ENGINEER. Seeding shall not be done during windy weather or when the ground is excessively wet, frozen or otherwise untillable.

**3.2 SOIL PREPARATION**

- A. All areas shall be graded to surface drain as shown on the plans. The lime and fertilizer shall be applied at the rates specified above and tilled into the surface 4 inches with approved tillage equipment to provide a reasonably firm, but friable seedbed.

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- B. All areas to be seeded or sodded shall meet the specified grades, and be free of any weed or undesirable plant growth or debris.
- C. Lime and fertilizer for all areas shall be applied at the rate specified and incorporated into the top four inches by approved tillage equipment. The seed and wood cellulose mulch shall then be mixed with adequate water to produce a slurry and then applied uniformly with a hydroseeder at the rates specified above. Any area inadequately covered shall be redone as directed by the ENGINEER.

### **3.3 MAINTENANCE OF SEEDED AREAS:**

- A. The CONTRACTOR shall maintain seeded areas until they have been mowed two times and then he shall repair eroded areas one time after the second mowing. Each mowing shall be when the grass is about four inches (4") high and cut back to about 2 1/2". After the second mowing, the CONTRACTOR shall notify the ENGINEER that he is ready to repair erosion damage so that an inspection can be scheduled when the erosion repair work is complete. Once the erosion areas have been filled with topsoil, fertilized, seeded and mulched and the work has been inspected and approved by the ENGINEER, the work under this section is complete. Any further erosion repair work necessary will be treated as an extra and shall be done only when authorized by the ENGINEER.

### **3.4 CARE DURING CONSTRUCTION**

- A. The CONTRACTOR shall be responsible for repair to turf areas damaged by his equipment or men until all work is accepted. Temporary haul roads and storage areas shall be tilled to depth of four inches (4") and fertilized, seeded and mulched as specified above.

END OF SECTION

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## SECTION 02957 Erosion Control and Stabilization

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. This Section includes provisions for erosion control and stabilization.

### PART 2 PRODUCTS

#### 2.1 EROSION CONTROL

- A. All drainage paths and swales to be cut, graded and seeded prior to any utilities trenching.
- B. All drainage paths and excavated areas to be mulched upon completion of seeding. Straw bales to be staked perpendicular to flow in bottom of swale every 100 feet along drainage swale route. Straw bales to remain in swale route until a substantial growth of grass has been established. Straw bales to be staked around all inlet rims where swale lines are excavated to route storm water flow into inlet.
- C. Erosion control requires immediate seeding and mulching of any stripped and unvegetated areas, including unpaved right-of-ways.

#### 2.2 SEEDING

- A. A leguminous inoculated seed mixture shall be used for all seed areas. Class of seeding as follows:

- 1. Mixture A: shall be used for all drainage paths, swales, side slopes, and all other areas where existing lawn is disturbed during construction.

Seed mixture shall be as follows:

2 lbs./1000 sq. ft. - Chewings Fescue

2 lbs./1000 sq. ft. - Kentucky Bluegrass

2 lbs./1000 sq. ft. - Perennial Rye

Seed shall be sown at a rate of 6 lbs. per 1000 sq. ft. of area.

- 2. Mixture B: shall be for all areas disturbed by excavation and re-grading as seasonal or temporary cover in bare areas.

Seed mixture shall be as follows:

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1 lb./1000 sq. ft. - Perennial Rye

1 lb./1000 sq. ft. - Annual Rye

Seed shall be sown at a rate of 4 lbs. per 1000 sq. ft. of area.

3. Mixture C: shall be used for all lake or pond banks.

Seed mixture shall be as follows:

20% Perennial Ryegrass

15% Kentucky Bluegrass

15% Creeping Red Fescue

50% Nutri-Kote plus Apron fungicide seed coating.

Seed shall be sown at a rate of 5 lbs. per 1000 sq. ft. of area.

## **2.3 FERTILIZER**

- A. Apply a minimum of 600 lbs. of 12-12-12 fertilizer per acre.

## **2.4 MULCH**

- A. Mulch shall consist of clean, seed-free threshed straw of wheat, rye, oats, or barley. Mulch to be spread uniformly to form a continuous blanket not less than 1.5 inches loose measurement over "Mixture A" and "Mixture C" seeded areas.
- B. The mulch shall be held in place by being mechanically crimped into the soil, tackified with a bio-degradable tackifier, or netted and stapled to the soil with a photo-degradable or bio-degradable netting. The mulch should be applied at a minimum rate of 1500 lbs. per acre.

## **2.5 STRAW TACKIFIER - MULCH TACKIFIER**

- A. The tackifier shall be a naturally derived product from all organic sources resulting in a strong resilient muciloid, non-bitumen M-Binder. The product can be used in a hydro-seeder with both 100% Virgin Wood Fiber or Paper Wood Cellulose mulch and can be sprayed on 100% Wheat Straw Mulch for stabilization from the wind. Application rates vary between 60-140 lbs. per acre depending upon the existing conditions. The product shall be packed in 40 lbs. fiber bags.

Technical Specifications:

|                   |      |
|-------------------|------|
| Protein Content   | 1.62 |
| Ash Content       | 2.7  |
| Fiber             | 4.0  |
| pH of 1% Solution | 6.8  |
| Settleable Solids | 5.0  |

- B. Erosion control requires immediate seeding and mulching of any stripped and un-vegetated areas, including unpaved right-of-ways.

**PART 3 (NOT USED)**

END OF SECTION



# *N O T I C E*

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**DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NATIONWIDE PERMIT AUTHORIZATION  
KENTUCKY DIVISION OF WATER 401 WQC**

---

**PROJECT:** Fleming County, Item No. 9-1084  
KY 32 over Mud Lick Creek

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The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects" & Division of Water General Water Quality Certification. In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

Station 43+25  
See sheet R7

Replace an existing bridge in place over Mud Lick Creek. The **perennial** stream will have impacts below the normal high water mark due to the bridge construction. The impacts will be the extension of the stream crossing and bank stabilization. The bank stabilization is necessary to reduce scour during large flood events. The estimated area of impact is **145 linear feet** and **0.03 acres**. The drainage area at the bridge is **1.27 square miles**.  
**Lat 38.421098, Long -83.804203**

This project involves work near and/or within Jurisdictional Waters of the United States as defined by the United States Army Corps of Engineers and therefore requires a Nationwide 14 General 404 Permit. The Division of Water certified this General Permit with several conditions (See attached). One that should be brought to your attention is regarding the use of heavy equipment in the stream channel. If there is need to cross the stream channel with heavy equipment or conduct work from within the stream channel a working platform or temporary crossing is authorized. This should be constructed with clean rock and sufficient pipe to allow stream flow to continue unimpeded (see attached typical drawing).

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



MATTHEW G. BEVIN  
GOVERNOR

CHARLES G. SNAVELY  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

R. BRUCE SCOTT  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

**General Certification--Nationwide Permit # 14  
Linear Transportation Projects**

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
3. The activity will impact less than 1/2 acre of wetland/marsh.

**General Certification--Nationwide Permit # 14**  
**Linear Transportation Projects**  
**Page 2**

4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet and in-stream stormwater detention/retention basins are not covered under this general water quality certification.
5. For complete linear transportation projects, all impacts shall not exceed a cumulative length of 500 linear feet within each Hydrologic Unit Code (HUC) 14.
6. Any crossings must be constructed in a manner that does not impede natural water flow.
7. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
8. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
9. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
10. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
  - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
  - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
  - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to,

**General Certification--Nationwide Permit # 14**  
**Linear Transportation Projects**  
**Page 3**

upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.

- Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
- To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

## **2017 Nationwide Permits Regional and Permit-Specific Conditions COMMONWEALTH OF KENTUCKY**

These regional conditions are in addition to, but do not supersede, the requirements in the Federal Register (Volume 82, No. 4 of January 6, 2017, pp 1860).

Notifications for all Nationwide Permits (NWP) shall be in accordance with General Condition No. 32.

1. For activities that would impact Outstanding State or National Resource Waters (OSNRWs), Exceptional Waters (EWs), Coldwater Aquatic Habitat Waters (CAHs) under the Endangered Species Act for the NWP listed below, a Pre-Construction Notification (PCN) will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWP (Section 404 activities), for impacts to these waters.

NWP 3 (Maintenance)

NWP 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities)

NWP 5 (Scientific Measurement Devices)

NWP 6 (Survey Activities)

NWP 7 (Outfall Structures and Associated Intake Structures)

NWP 12 (Utility Line Activities)

NWP 13 (Bank Stabilization)

NWP 14 (Linear Transportation Projects)

NWP 15 (U.S. Coast Guard Approved Bridges)

NWP 16 (Return Water from Upland Contained Disposal Areas)

NWP 17 (Hydropower Projects)

NWP 18 (Minor Discharges)

NWP 19 (Minor Dredging)

NWP 20 (Response Operations for Oil or Hazardous Substances)

NWP 21 (Surface Coal Mining Activities)

NWP 22 (Removal of Vessels)

NWP 23 (Approved Categorical Exclusions)

NWP 25 (Structural Discharges)

NWP 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities)

NWP 29 (Residential Developments)

NWP 30 (Moist Soil Management for Wildlife)

NWP 31 (Maintenance of Existing Flood Control Facilities)

NWP 32 (Completed Enforcement Actions)

NWP 33 (Temporary Construction, Access, and Dewatering)

NWP 34 (Cranberry Production Activities)

NWP 36 (Boat Ramps)

NWP 37 (Emergency Watershed Protection and Rehabilitation)

NWP 38 (Cleanup of Hazardous and Toxic Waste)

NWP 39 (Commercial and Institutional Developments)

NWP 40 (Agricultural Activities)

- NWP 41 (Reshaping Existing Drainage Ditches)
  - NWP 42 (Recreational Facilities)
  - NWP 43 (Stormwater Management Facilities)
  - NWP 44 (Mining Activities)
  - NWP 45 (Repair of Uplands Damaged by Discrete Events)
  - NWP 46 (Discharges in Ditches)
  - NWP 48 (Commercial Shellfish Aquaculture Activities)
  - NWP 49 (Coal Remining Activities)
  - NWP 50 (Underground Coal Mining Activities)
  - NWP 51 (Land-Based Renewable Energy Generation Facilities)
  - NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
  - NWP 53 (Removal of Low-Head Dams)
  - NWP 54 (Living Shorelines)
2. In addition to the notification and agency coordination requirements in the NWPs, for impacts greater than 0.25 acres in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:
- NWP 3 (Maintenance)
  - NWP 7 (Outfall Structures and Associated Intake Structures)
  - NWP 12 (Utility Line Activities)
  - NWP 14 (Linear Transportation Projects)
  - NWP 29 (Residential Developments)
  - NWP 39 (Commercial and Institutional Developments)
  - NWP 40 (Agricultural Activities)
  - NWP 41 (Reshaping Existing Drainage Ditches)
  - NWP 42 (Recreational Facilities)
  - NWP 43 (Stormwater Management Facilities)
  - NWP 44 (Mining Activities)
  - NWP 51 (Land-Based Renewable Energy Generation Facilities)
  - NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
  - NWP 53 (Removal of Low-Head Dams)
3. For activities in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:
- NWP 21 (Surface Coal Mining Activities)
  - NWP 27 (Aquatic Habitat Restoration, Establishment & Enhancement Activities)
  - NWP 49 (Coal Remining Activities)
  - NWP 50 (Underground Coal Mining Activities)
4. Nationwide Permit No. 14 – Linear Transportation Projects.
- (a) New road alignments or realignments are limited to a permanent loss of 500 linear feet of intermittent or perennial stream length at each crossing. Road crossings with permanent losses greater than 500 linear feet of intermittent or perennial stream associated with new



alignments or realignments will be evaluated as an individual permit (i.e., a Letter of Permission or as a Standard Individual Permit).

- (b) In addition to the notification requirements contained in NWP 14, the permittee must submit a PCN to the district engineer prior to commencing the activity for the permanent loss of greater than 300 feet of ephemeral, intermittent and perennial stream of all "waters of the U.S." (See General Condition 32 and the definition of "loss of waters of the United States" in the Nationwide Permits for further information.)
- 5. Notification in accordance with General Condition 32 is required to the Corps for all activities which are subject to jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- 6. All applications are required as both a paper copy and in an electronic media format, including electronic mail or compact disc.
- 7. For all activities, the applicant shall review the U.S. Fish and Wildlife Service's IPaC website: <http://ecos.fws.gov/ipac> to determine if the activity might affect threatened and/or endangered species or designated critical habitat. If federally-listed species or designated critical habitat are identified, a PCN in accordance with General Condition 18 and 32 would be triggered and the official species list generated from the IPaC website must be submitted with the PCN.

Further information:

Outstanding State or National Resource Water (OSNRWs), Exceptional Waters (EWs), and Coldwater Aquatic Habitat Waters (CAHs) are waters designated by the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet. The list can be found at the following link: <http://eppcapp.ky.gov/spwaters/>

Information on Pre-Construction Notification (PCN) can be found at NWP General Condition No. 32 in the Federal Register (Volume 81, No. 105 of June 1, 2017, pp 35211).



**COORDINATING RESOURCE AGENCIES**

Chief, Wetlands Regulatory Section  
U.S. Environmental Protection Agency  
Region IV  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

Supervisor  
U.S. Fish & Wildlife Service  
JC Watts Federal Building, Room 265  
330 West Broadway  
Frankfort, Kentucky 40601

Supervisor  
401 Water Quality Certification  
Kentucky Division of Water  
300 Sower Boulevard, 3<sup>rd</sup> Floor  
Frankfort, KY 40601

Commissioner  
Department of Fish and Wildlife Resources  
#1 Game Farm Road  
Frankfort, Kentucky 40601

Executive Director and State Historic Preservation Officer  
Kentucky Heritage Council  
300 Washington Street  
Frankfort, Kentucky 40601

**ADDITIONAL COORDINATING RESOURCE AGENCY**  
**FOR NWPS 21, 49, AND 50**

Kentucky Department for Natural Resources  
Division of Mine Permits  
300 Sower Boulevard  
Frankfort, KY 40601

Terms for Nationwide Permit No. 14  
Linear Transportation Projects

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

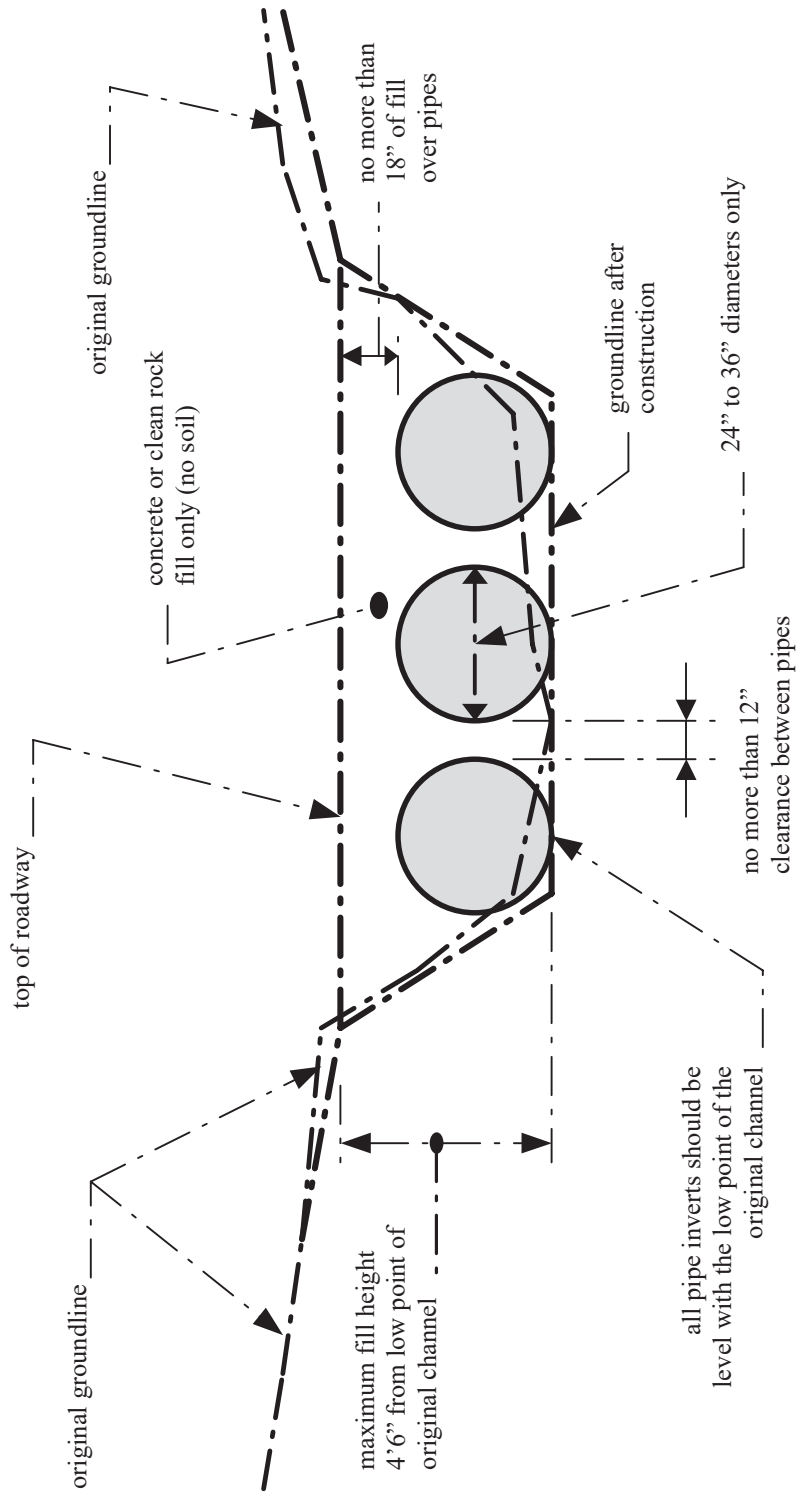
Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

ATTACHMENT 1



NOTES:

- 1. This is a conceptual drawing. The number and size of pipes and other details will vary depending on specific site conditions.
- 2. The pipes and backfill must be contained within the stream channel as shown above. During the construction of the approaches and access roadway across the floodplain, unstable and unconsolidated materials unsuitable for roadways may be excavated and replaced with riprap, crushed stone, or other stable road construction materials. This may only be done, however, with the following provisions: (1) the disposal of excess, unconsolidated materials thus excavated must be outside of the floodplain and (2) the finished surface of the completed road may be no more than three inches (3") above the pre-construction surface of the floodplain at any point beyond the top of banks.

LOW-WATER CROSSING

STANDARD DRAWING  
Not to Scale

Kentucky Transportation  
Cabinet Project:

# ***N O T I C E***

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**DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NATIONWIDE SECTION 404 PERMIT AUTHORIZATION**

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
KENTUCKY DIVISION OF WATER  
SECTION 401 WATER QUALITY CERTIFICATION**

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**PROJECT DESCRIPTION: Bridge Replacement  
KY 1 over Powell Branch  
Carter County, KY  
KYTC Item No. 9-10002**

---

The Sections 404 and 401 activities for this project have previously been permitted under the authority of the Department of the Army, Section 404 Nationwide Permit Number 3, *Maintenance Projects* (with additional *Kentucky Regional General Conditions*), and the Kentucky Division of Water, Section 401 General Water Quality Certification. For these authorized permits to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit Number 3 and General Water Quality Certification in a conspicuous location at the project site, with unencumbered public access, for the duration of construction and comply with the general conditions required.

---

Kentucky Transportation  
Cabinet Project:

Locations Impacting Water Quality

| Station-Location                | Description                                                                                                                                                                                                                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bridge ID:<br><b>022B00006N</b> | <b>022B00006N (KY 1 over Powell Branch)</b> project will entail replacing the existing bridge and constructing a new bridge at the same location with the same current geometrics (bridge width, length, hydraulic opening, etc.). The project may involve the removal of debris and/or sediment. |

This project involves work near and/or within Jurisdictional Waters of the United States as defined by the U. S. Army Corps of Engineers; therefore, requiring a Nationwide Number 3 General Section 404 permit. The Division of Water conditionally certified this General Permit. Importantly, one of those conditions regards the use of heavy equipment in any stream channel, or streambed. If there is need to cross the stream channel with heavy equipment, or conduct work within the stream channel, a work platform or temporary crossing, is authorized. This should be constructed with clean rock and sufficient pipe to allow stream flow to continue, unimpeded. Other conditions may be found under the heading, *General Certification—Nationwide Permit # 3 Maintenance Projects*.

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit Number 3 Approval in a conspicuous location at the project site, for the duration of the construction, and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

Terms for Nationwide Permit No. 3 – Maintenance Projects

- (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.
- (b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.
- (c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act section 404(f) exemption for maintenance.



MATTHEW G. BEVIN  
GOVERNOR

CHARLES G. SNAVELY  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

R. BRUCE SCOTT  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

## **General Certification--Nationwide Permit # 3 Maintenance**

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

The Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 3, namely Maintenance, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
3. The activity will impact less than 1/2 acre of wetland/marsh.
4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth.

**General Certification--Nationwide Permit # 3**  
**Maintenance**  
**Page 2**

5. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
6. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
7. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
  - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
  - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur.
  - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
  - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
  - Removal of riparian vegetation shall be limited to that necessary for equipment access.
  - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
  - Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
  - Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.



**General Certification--Nationwide Permit # 3**  
**Maintenance**  
**Page 3**

- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



**US Army Corps  
of Engineers®**

Louisville District

# 2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>

17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pdfs/species/esa> respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. **Historic Properties.** (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, and adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g. conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based on what is best for the aquatic environmental on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater, and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(i)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally

authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWPs the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by any proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant pre-crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other water for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an

illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that may be affected by the proposed activity. For any NWP activity that requires pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. Federal permittees must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line or ordinary high water mark.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural

resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

#### Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).



KyTC BMP Plan for Project CID ## - #####; Item No. 9-1084



**Kentucky Transportation Cabinet**

**Highway District \_9\_**

**And**

**\_\_\_\_\_ (2), Construction**

**Kentucky Pollutant Discharge Elimination System**

**Permit KYR10**

**Best Management Practices (BMP) plan**

**Groundwater protection plan**

**For Highway Construction Activities**

**For**

***Fleming County; KY 32***

***Address deficiencies of bridge on KY 32 over Mud***

***Lick Creek 0.2 mile W of Craintown Rd***

**Project: CID ## - #####; Item No. 9-1084**

KyTC BMP Plan for Project CID ## - #####; Item No. 9-1084

## Project information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District **9**
2. Resident Engineer: (2)
3. Contractor name: (2)  
Address: (2)  
  
Phone number: (2)  
Contact: (2)  
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number (2)
5. Route (Address) **KY 32**
6. Latitude/Longitude (project mid-point) **38.421359, -83.804972**
7. County (project mid-point) **Fleming**
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)



KyTC BMP Plan for Project CID ## - #####; Item No. 9-1084

## A. Site description:

1. Nature of Construction Activity (from letting project description) **Address deficiencies of bridge on KY 32 over Mud Lick Creek 0.2 mile W of Craintown Rd**
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved **5969 cubic yards**
4. Estimate of total project area (acres) **4 acres**
5. Estimate of area to be disturbed (acres) **4 acres**
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition **None known. & (2)**
8. Data describing existing discharge water quality (if any) **None.& (2)**
9. Receiving water name **Mud Lick Creek**
10. TMDLs and Pollutants of Concern in Receiving Waters: **Mud Lick Creek does not appear on the KY Division of Water's 2016 303(d) List of Impaired Waters.**
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

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The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

### **B. Sediment and Erosion Control Measures:**

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
  - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
  - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants.

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Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

- Clearing and Grubbing – The following BMP's will be considered and used where appropriate.
  - Leaving areas undisturbed when possible.
  - Silt basins to provide silt volume for large areas.
  - Silt Traps Type A for small areas.
  - Silt Traps Type C in front of existing and drop inlets which are to be saved
  - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
  - Brush and/or other barriers to slow and/or divert runoff.
  - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
  - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
  - Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
  - Silt Traps Type B in ditches and/or drainways as they are completed
  - Silt Traps Type C in front of pipes after they are placed
  - Channel Lining
  - Erosion Control Blanket
  - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
  - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
  - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
  - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
  - Additional Channel Lining and/or Erosion Control Blanket.
  - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
  - Special BMP's such as Karst Policy

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- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
  - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
  - Permanent Seeding and Protection
  - Placing Sod
  - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are : **None.**

## C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Section Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

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### 4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

#### ➤ **Good Housekeeping:**

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

#### ➤ **Hazardous Products:**

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

**The following product-specific practices will be followed onsite:**

#### ➤ **Petroleum Products:**

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Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

### ➤ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

### ➤ **Paints:**

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

### ➤ **Concrete Truck Washout:**

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

### ➤ **Spill Control Practices**

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

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- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

### D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. **None.**

### E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
  - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for



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the purpose of post construction storm water management with specific guidance for any non-routine maintenance. **None.**

## F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.



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## G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water from cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

## H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

- Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

\_\_\_\_\_ 2. (e) land treatment or land disposal of a pollutant;

\_\_\_\_\_ 2. (f) Storing, ..., or related handling of hazardous waste, solid waste or special waste, ..., in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

\_\_\_\_\_ 2. (g) .... Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

\_\_\_\_\_ 2. (j) Storing or related handling of road oils, dust suppressants, ...., at a central location;

\_\_\_\_\_ 2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

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\_\_\_\_\_ 2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

\_\_\_\_\_ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the

401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

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### Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

### Resident Engineer and Contractor Certification:

#### (2) Resident Engineer signature

Signed \_\_\_\_\_ title \_\_\_\_\_, \_\_\_\_\_  
Typed or printed name<sup>2</sup> signature

(3) Signed \_\_\_\_\_ title \_\_\_\_\_, \_\_\_\_\_  
Typed or printed name<sup>1</sup> signature

1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601. Reference the Contract ID No. (CID), Item No. and KPDES number when one has been issued.

2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601. Reference the Contract ID No. (CID), Item No., and KPDES number when one has been issued.

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor

Name:  
Address:  
Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed \_\_\_\_\_title\_\_\_\_\_, \_\_\_\_\_  
Typed or printed name<sup>1</sup>signature

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601. Reference the Contract ID No. (CID), Item No., and KPDES number when one has been issued.

## ***SPECIAL NOTE***

### **Filing of eNOI for KPDES Construction Stormwater Permit**

**County: Fleming**

**Route: KY 32**

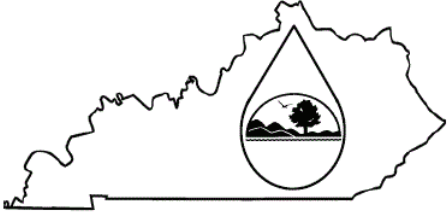
**Item No.: 9-1084.00**

**KDOW Submittal ID: 159285**

**Project Description: Address deficiencies of bridge on KY 32 over Mud Lick Creek 0.2 mile W of Craintown Rd (035B00038N)**

**A Notice of Intent for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the “Building Contractor” and it will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control as well as meeting the requirements of the KYR10 permit and the KDOW.**

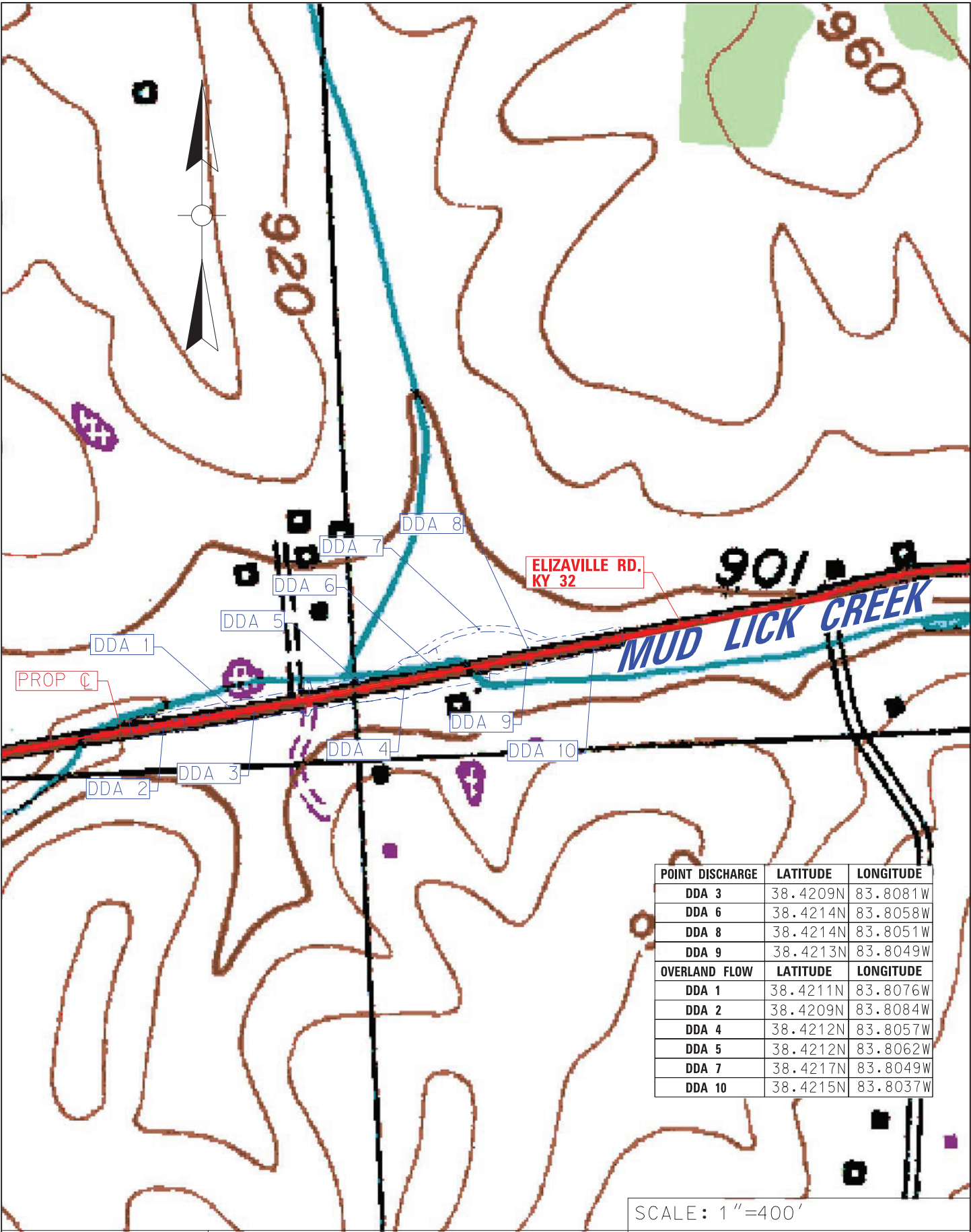
**If there are any questions regarding this note, please contact Director, Division of Environmental Analysis, TCOB, 200 Mero Street, Frankfort, KY 40622, Phone: (502) 564-7250.**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                               | <b>KENTUCKY POLLUTION DISCHARGE<br/>ELIMINATION SYSTEM (KPDES)</b><br>Notice of Intent (NOI) for coverage of Storm Water Discharge Associated with Construction Activities Under the KPDES Storm Water General Permit KYR100000<br><a href="#">Click here for Instructions (Controls/KPDES_FormKYR10_Instructions.htm)</a><br><small>Click here to obtain information and a copy of the KPDES General Permit. (http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)</small><br><small>(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field</small> |                          |
| Reason for Submittal:(*)<br>Application for New Permit Coverage ▼                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Agency Interest ID:<br>Agency Interest ID                                                                     | Permit Number:(✓)<br>KPDES Permit Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |
| If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓)<br><input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| <b>ELIGIBILITY:</b><br>Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.                                                                                                                                                                                                                                                                                                                                            |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| <b>EXCLUSIONS:</b><br>The following are excluded from coverage under this general permit:<br>1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan;<br>2) Any operation that the DOW determines an individual permit would better address the discharges from that operation;<br>3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed. |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| <b>SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| Company Name:(✓)<br>Kentucky Transportation Cabinet - D9 Flemingsburg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | First Name:(✓)<br>Steve                                                                                       | M.I.:<br>MI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Last Name:(✓)<br>Gunnell |
| Mailing Address:(*)<br>822 Elizaville Avenue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | City:(*)<br>Flemingsburg                                                                                      | State:(*)<br>Kentucky ▼                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Zip:(*)<br>41041         |
| eMail Address:(*)<br>steve.gunnell@ky.gov                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Business Phone:(*)<br>606-845-2551                                                                            | Alternate Phone:<br>Phone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |
| <b>SECTION II -- GENERAL SITE LOCATION INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| Project Name:(*)<br>KY 32 Mud Lick Bridge Replacement; CID#, Item No. 9-1084                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Status of Owner/Operator(*)<br>State Government ▼                                                             | SIC Code(*)<br>1622 Bridge, Tunnel, and I ▼                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |
| Company Name:(✓)<br>Kentucky Transportation Cabinet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | First Name:(✓)<br>Steve                                                                                       | M.I.:<br>MI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Last Name:(✓)<br>Gunnell |
| Site Physical Address:(*)<br>KY 32                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| City:(*)<br>Ewing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | State:(*)<br>Kentucky ▼                                                                                       | Zip:(*)<br>41039                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |
| County:(*)<br>Fleming ▼                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Latitude(decimal degrees)(*)DMS to DD Converter<br>(https://www.fcc.gov/media/radio/dms-decimal)<br>38.421369 | Longitude(decimal degrees)(*)<br>-83.804972                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |
| <b>SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION</b> ?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| Project Description:(*)<br>Address deficiencies of bridge on KY 32 over Mud Lick Creek 0.2 mile W of Craintown Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| a. For single projects provide the following information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| Total Number of Acres in Project:(✓)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                               | Total Number of Acres Disturbed:(✓)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |

| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4                                                                                                                                                                                                                                                                                                                  |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------|----------------------|-----------|----------------------|--|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|---|----|----------|-----------|----------------|--------|----|----|----------|-----------|----------------|--------|
| Anticipated Start Date:(✓)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Anticipated Completion Date:(✓)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                         |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| b. For common plans of development provide the following information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Total Number of Acres in Project:(✓)<br># Acre(s)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Total Number of Acres Disturbed:(✓)<br># Acre(s)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                        |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Number of individual lots in development, if applicable:(✓)<br># lot(s)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Number of lots in development:(✓)<br># lot(s)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                           |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Total acreage of lots intended to be developed:(✓)<br>Project Acres<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Number of acres intended to be disturbed at any one time:(✓)<br>Disturbed Acres<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                         |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Anticipated Start Date:(✓)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Anticipated Completion Date:(✓)<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                         |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| List Building Contractor(s) at the time of Application:(*)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 60%;">Company Name</th> <th style="width: 35%;"></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">+</td> <td style="height: 100px;"></td> <td></td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                    |           | Company Name       |                      | +         |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Company Name                                                                                                                                                                                                                                                                                                       |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED ?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Discharge Point(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Unnamed Tributary?</th> <th>Latitude</th> <th>Longitude</th> <th>Receiving Water Name</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>No</td><td>38.42090</td><td>-83.80810</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>2</td><td>No</td><td>38.42090</td><td>-83.80840</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>3</td><td>No</td><td>38.42110</td><td>-83.80760</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>4</td><td>No</td><td>38.42120</td><td>-83.80570</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>5</td><td>No</td><td>38.42120</td><td>-83.80620</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>6</td><td>No</td><td>38.42130</td><td>-83.80490</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>7</td><td>No</td><td>38.42140</td><td>-83.80510</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>8</td><td>No</td><td>38.42140</td><td>-83.80580</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>9</td><td>No</td><td>38.42150</td><td>-83.80370</td><td>Mud Lick Creek</td><td>Delete</td></tr> <tr><td>10</td><td>No</td><td>38.42170</td><td>-83.80490</td><td>Mud Lick Creek</td><td>Delete</td></tr> </tbody> </table> |                                                                                                                                                                                                                                                                                                                    |           | Unnamed Tributary? | Latitude             | Longitude | Receiving Water Name |  | 1 | No | 38.42090 | -83.80810 | Mud Lick Creek | Delete | 2 | No | 38.42090 | -83.80840 | Mud Lick Creek | Delete | 3 | No | 38.42110 | -83.80760 | Mud Lick Creek | Delete | 4 | No | 38.42120 | -83.80570 | Mud Lick Creek | Delete | 5 | No | 38.42120 | -83.80620 | Mud Lick Creek | Delete | 6 | No | 38.42130 | -83.80490 | Mud Lick Creek | Delete | 7 | No | 38.42140 | -83.80510 | Mud Lick Creek | Delete | 8 | No | 38.42140 | -83.80580 | Mud Lick Creek | Delete | 9 | No | 38.42150 | -83.80370 | Mud Lick Creek | Delete | 10 | No | 38.42170 | -83.80490 | Mud Lick Creek | Delete |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unnamed Tributary?                                                                                                                                                                                                                                                                                                 | Latitude  | Longitude          | Receiving Water Name |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42090  | -83.80810          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42090  | -83.80840          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42110  | -83.80760          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42120  | -83.80570          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42120  | -83.80620          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42130  | -83.80490          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42140  | -83.80510          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42140  | -83.80580          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No                                                                                                                                                                                                                                                                                                                 | 38.42150  | -83.80370          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No                                                                                                                                                                                                                                                                                                                 | 38.42170  | -83.80490          | Mud Lick Creek       | Delete    |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED ?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Name of MS4:<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Date of application/notification to the MS4 for construction site permit coverage:<br>Date<br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Discharge Point(s):(*)<br><table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Latitude</th> <th>Longitude</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">+</td> <td style="height: 100px;"></td> <td></td> <td></td> </tr> </tbody> </table> |           | Latitude           | Longitude            |           | +                    |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Latitude                                                                                                                                                                                                                                                                                                           | Longitude |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Will the project require construction activities in a water body or the riparian zone?:(*)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Yes <span style="float: right;">▼</span>                                                                                                                                                                                                                                                                           |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| If Yes, describe scope of activity: (✓)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bridge replacement in same location with a maintenance of traffic divi                                                                                                                                                                                                                                             |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Is a Clean Water Act 404 permit required?:(*)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes <span style="float: right;">▼</span>                                                                                                                                                                                                                                                                           |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| Is a Clean Water Act 401 Water Quality Certification required?:(*)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Yes <span style="float: right;">▼</span>                                                                                                                                                                                                                                                                           |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |
| SECTION VII -- NOI PREPARER INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                    |           |                    |                      |           |                      |  |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |   |    |          |           |                |        |    |    |          |           |                |        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                          |                                                                 |                                                                                                    |                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------|
| First Name:(*)<br><input type="text" value="Karen"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | M.I.:<br><input type="text" value="L"/>                  | Last Name:(*)<br><input type="text" value="Mynhier"/>           | Company Name:(*)<br><input type="text" value="Kentucky Transportation Cabinet - D9 Flemingsburg"/> |                                               |
| Mailing Address:(*)<br><input type="text" value="822 Elizaville Avenue"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          | City:(*)<br><input type="text" value="Flemingsburg"/>           | State:(*)<br><input type="text" value="Kentucky"/>                                                 | Zip:(*)<br><input type="text" value="41041"/> |
| eMail Address:(*)<br><input type="text" value="karen.mynhier@ky.gov"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                          | Business Phone:(*)<br><input type="text" value="606-845-2551"/> | Alternate Phone:<br><input type="text" value="Phone"/>                                             |                                               |
| SECTION VIII -- ATTACHMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                          |                                                                 |                                                                                                    |                                               |
| Facility Location Map:(*)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          | <input type="button" value="Upload file"/>                      |                                                                                                    |                                               |
| Supplemental Information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          | <input type="button" value="Upload file"/>                      |                                                                                                    |                                               |
| SECTION IX -- CERTIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                          |                                                                 |                                                                                                    |                                               |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |                                                          |                                                                 |                                                                                                    |                                               |
| Signature:(*)<br><input type="text" value="Signature"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Title:(*)<br><input type="text" value="Title"/>                 |                                                                                                    |                                               |
| First Name:(*)<br><input type="text" value="First Name"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | M.I.:<br><input type="text" value="MI"/>                 | Last Name:(*)<br><input type="text" value="Last Name"/>         |                                                                                                    |                                               |
| eMail Address:(*)<br><input type="text" value="eMail Address"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Business Phone:(*)<br><input type="text" value="Phone"/> | Alternate Phone:<br><input type="text" value="Phone"/>          | Signature Date:(*)<br><input type="text" value="Date"/>                                            |                                               |
| <input type="button" value="Click to Save Values for Future Retrieval"/> <input type="button" value="Click to Submit to EEC"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                          |                                                                 |                                                                                                    |                                               |





KENTUCKY TRANSPORTATION CABINET  
COMMUNICATING ALL PROMISES (CAP)

---

ITEM NO.  
09-10002.00

PROJECT MANAGER  
Royce Meredith, PE

| <u>CAP #</u> | <u>Date of Promise</u> | <u>Promise made to</u> | <u>Location of Promise</u> |
|--------------|------------------------|------------------------|----------------------------|
| 1            | 5-22-19                | SHPO                   | Parcel 1                   |

CAP Description  
No additional r/w, easements, or temporary use of land owned by the historic WPA school shall allow more than what is shown on the plans. The SHPO owns an easement on the property and have granted us a de minimis finding for the proposed use, based on the understanding the contract will not be permitted to use any more of the school's property for a lay down yard, or any other activity.



**Stantec Consulting Services Inc.**  
3052 Beaumont Centre Circle, Lexington KY 40513-1703

March 26, 2019  
File: RP\_STN\_DLB\_022B00006N

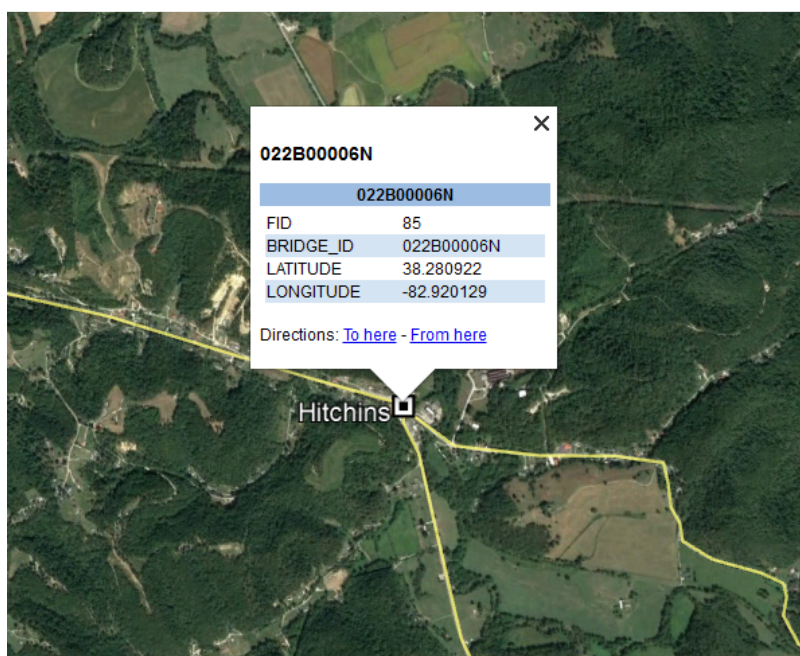
**Attention: Mr. Brian Meade, PE**  
Bridging Kentucky Area 4 Team Lead  
AECOM  
Suite 1600  
Louisville, Kentucky 40202

**Reference: Geotechnical Exploration**  
**022B00006N**  
**9' x 5' RCBC, Sta. 7+73.6 KY 1**  
**Carter County, Kentucky**

Dear Mr. Meade,

Typed boring logs and laboratory testing results presenting subsurface data for this culvert is being transmitted with this letter. Recommendations for design and construction of the culvert and wingwall foundations are presented herein.

The proposed 9 x 5-foot culvert intersects KY 1 at Station 7+73.6. Refer to Figure 1 below for a vicinity map showing the culvert location. Presented in Appendix A is a boring layout map showing the boring locations. Based on the structure profile, the maximum embankment height near the culvert is about 16 feet.



**Figure 1 – Google Image showing Project Site.**



March 26, 2019  
Mr. Brian Meade, PE  
Page 2 of 4

**Reference: Geotechnical Exploration  
022B00006N  
9' x 5' RCBC, Sta. 7+73.6 KY 1  
Carter County, Kentucky**

Available geologic mapping (USGS Geologic Map of the Grayson Quadrangle (GQ-640) indicates that the project area is underlain by alluvium. Based on the mapping, the alluvial deposits vary in thicknesses up to approximately 60 feet.

The Breathitt Formation, of the Lower and Middle Pennsylvanian geologic period, underlies the alluvium. The Breathitt Formation consists of cyclic sequences of sandstone, shale, siltstone and coal. The sandstone is light to medium gray, fine to medium grained, micaceous, thick bedded and locally contains ironstone concretions. The siltstone is gray and locally calcareous. The shale is light gray, and carbonaceous.

The borings drilled during field operations consisted of two sample borings with rock core designated herein as 022B00006N-1 and 022B00006N-2. The boring location and surface elevation were obtained by the Bridging Kentucky TEAM and are presented in Appendix A. Table 1 provides a summary of the locations, elevations, and depths of the borings drilled for the proposed structure.

**Table 1 – Summary of Borings**

| Hole No.     | Latitude  | Longitude  | Surface Elevation (ft.) MSL | Top of Rock/Refusal |                     | Begin Core  |                     | Bottom of Hole |                     |
|--------------|-----------|------------|-----------------------------|---------------------|---------------------|-------------|---------------------|----------------|---------------------|
|              |           |            |                             | Depth (ft.)         | Elevation (ft.) MSL | Depth (ft.) | Elevation (ft.) MSL | Depth (ft.)    | Elevation (ft.) MSL |
| 022B00006N-1 | 38.280821 | -82.920482 | 603.7                       | 55.0                | 548.7               | 55.0        | 548.7               | 65.0           | 538.7               |
| 022B00006N-2 | 38.281104 | -82.919748 | 607.8                       | 28.5                | 579.3               | 28.5        | 579.3               | 39.0           | 568.8               |

Observation wells were not installed. Groundwater was encountered during drilling at a depth of 18.0 feet in boring 022B00006N-1 and at a depth of 22.0 feet in boring 022B00006N-2. Groundwater levels and/or conditions may vary considerably, with time, according to the prevailing climate, rainfall or other factors.

Due to the fill height being less than 20 feet, and the proposed culvert will be constructed in the same location of the existing, slope stability analyses and settlement analyses were not deemed necessary.



March 26, 2019  
Mr. Brian Meade, PE  
Page 3 of 4

**Reference: Geotechnical Exploration  
022B00006N  
9' x 5' RCBC, Sta. 7+73.6 KY 1  
Carter County, Kentucky**

## Recommendations

- Based on the conditions encountered, a yielding foundation system is recommended for the culvert. The Designer should include a plan note on the drawings that states "For the purpose of maintaining uniform yielding conditions, any boulders, bedrock, or soft soil materials encountered within two feet of the bottom of footing elevation (culvert and wingwall) shall be over excavated and the resulting excavation backfilled with properly compacted on-site soil material. Soil backfill required within footing bearing areas should be placed in maximum eight-inch loose lift thickness and compacted to 95 percent of the soil's maximum dry density, as determined by standard Proctor testing. The moisture content of the backfill material should not vary by more than 2 percent of the soils optimum moisture content."
- In the event, loose and/or water-softened soils are encountered following foundation excavation, such soils should be under-cut a minimum of 2.5 feet below the bottom of footing elevation. The resulting excavated area should be stabilized with compacted granular embankment according to Section 805 of the current Kentucky Department Highways Standard Specifications for Road and Bridge Construction. Likewise, if boulders or other unsuitable bearing materials are encountered during excavation, undercutting of such materials and backfilling with compacted granular embankment or properly compacted on site soil material will be necessary in order to provide uniform bearing conditions beneath the culvert.
- Provided the above construction preparation techniques are followed, the footings should be sized at the service limit state using the factored bearing resistance based the depth of over-excavation and replacement identified below. For checking strength and extreme limit states, the nominal bearing resistance is provided in the table below. Use resistance factors of 0.45 and 1.0 for the strength and extreme limit state analysis respectively.

| Depth of Over-Excavation and Replacement (ft) | Factored Bearing Capacity – Service Limit State (ksf) | Nominal Bearing Capacity (ksf) |
|-----------------------------------------------|-------------------------------------------------------|--------------------------------|
| 0                                             | 1.0                                                   | 3.0                            |
| 2                                             | 1.5                                                   | 4.5                            |
| 3                                             | 2.2                                                   | 6.5                            |
| 4                                             | 3.2                                                   | 9.5                            |



March 26, 2019  
Mr. Brian Meade, PE  
Page 4 of 4

**Reference: Geotechnical Exploration  
022B00006N  
9' x 5' RCBC, Sta. 7+73.6 KY 1  
Carter County, Kentucky**

- Granular Embankment used as backfill shall be non-erodible and shall conform to the requirements of Section 805 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. Contrary to Section 805 of the Standard Specifications, the maximum size limit shall be reduced to 4 inches. The Granular Embankment material shall be wrapped with Type IV geotextile fabric in accordance with Sections 214 and 843 of the current Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction to provide separation from the clay embankment and/or foundation materials.
- The wingwalls should be designed using Soil Type 3 of Exhibit 413 in the Division of Structural Design Guidance Manual as backfill material. It should be noted that the backfill slope referred to in this exhibit is the slope perpendicular to the wingwall.
- The Designer should include a note on the drawings stating, "Temporary sheeting, shoring, cofferdams and/or dewatering methods may be required for the installation of the culvert."
- The culvert shall have a paved flowline. The paved flowline shall extend to the outside ends of the culvert's wingwalls (includes paving culvert's inlet and outlet).

Should you have any questions concerning this letter, please contact our office.

Regards,

**STANTEC CONSULTING SERVICES INC.**

Donald Blanton, PE  
Project Manager  
Phone: (859) 422-3033  
Fax: (859) 422-3100  
Donald.Blanton@stantec.com

Attachment: Appendix A – Site Map  
Appendix B – Typed Boring Logs  
Appendix C – Laboratory Data Sheets


Design with community in mind

# **APPENDIX A SITE MAP**





**LEGEND**

 SOIL BORING WITH UNDISTURBED (SHELBY) TUBE SAMPLES  
AND/OR STANDARD PENETRATION TESTS AND ROCK CORE

© 2019 Microsoft Corporation © 2019 DigitalGlobe ©CNES (2019) Distribution Airbus DS © 2019 HERE 

PLOT DATE: 02/07/2019 USER: ELLISON, DOC  
V:\1785\ACTIVE\178568003\GEOTECHNICAL\022B00006N\DRAWING\022B00006N\_LAYO.DWG



|                                |              |                                                                      |                   |
|--------------------------------|--------------|----------------------------------------------------------------------|-------------------|
| GRAPHIC SCALE:<br><br>1" = 50' |              | BRIDGING KENTUCKY                                                    |                   |
| DATE: 02/07/2019               |              | BRIDGE: 022B00006N                                                   | PAGE NO.<br><br>- |
| DRAWN BY: RWE                  | CKD. BY: DLB | SHEET:<br><br>9'x5' CULVERT AT KY 1 STA. 7+73.6<br>CARTER COUNTY, KY | FIG. NO.<br><br>- |
| STANTEC JOB NO.: 178568003     |              |                                                                      |                   |
| FILE NAME:                     |              |                                                                      |                   |



## **APPENDIX B**

## **TYPED BORING LOGS**

|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|---------------------------------|-------|--------------------------------------------------------------|------------|---------------------------------|---------------------------------------|----------------------------------|-------------|----------------------------|
| Project ID: <b>178568003</b>    |       | <b>Statewide - Various</b>                                   |            |                                 | Project Type: <b>Structure Bridge</b> |                                  |             |                            |
| Item Number: <b>Statewide</b>   |       |                                                              |            |                                 | Project Manager: <b>_</b>             |                                  |             |                            |
| Hole Number <b>022B00006N-1</b> |       | Immediate Water Depth <b>18.0 (01/29/19)</b>                 |            | Start Date <b>01/29/2019</b>    |                                       | Hole Type <b>core and sample</b> |             |                            |
| Surface Elevation <b>603.7'</b> |       | Static Water Depth <b>NA</b>                                 |            | End Date <b>01/31/2019</b>      |                                       | Rig_Number <b>_</b>              |             |                            |
| Total Depth <b>65.0'</b>        |       | Driller <b>danny jessie</b>                                  |            | Latitude(83) <b>38.280821</b>   |                                       |                                  |             |                            |
| Location <b>+ 'Lt.</b>          |       |                                                              |            | Longitude(83) <b>-82.920482</b> |                                       |                                  |             |                            |
| Lithology                       |       | Overburden                                                   | Sample No. | Depth (ft)                      | Rec. (ft)                             | SPT Blows                        | Sample Type | Remarks                    |
| Elevation                       | Depth | Rock Core                                                    | Std/Ky RQD | Run (ft)                        | Rec (ft)                              | Rec (%)                          | SDI (JS)    |                            |
| 5<br>598.7                      | 5.0   | Stiff, light brown, moist, sandy silty clay.                 | 1          | 2.0-3.5                         | 1.0                                   | 4-5-4                            | SPT         | 5                          |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|                                 |       |                                                              | 2          | 5.0-6.5                         | 1.5                                   | 1-2-4                            | SPT         |                            |
| 10<br>593.7                     | 10.0  | Firm, gray, moist, sandy silty clay.                         |            |                                 |                                       |                                  |             | 10                         |
|                                 |       |                                                              | 3          | 10.0-11.5                       | 1.5                                   | 2-2-4                            | SPT         |                            |
| 15<br>583.7                     | 20.0  | Soft to firm, gray to brown, moist to wet, sandy silty clay. |            |                                 |                                       |                                  |             | 15                         |
|                                 |       |                                                              | 4          | 15.0-16.5                       | 1.5                                   | 2-2-2                            | SPT         |                            |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
| 25<br>578.7                     | 25.0  | Very soft, gray, wet, silty clay.                            | 5          | 20.0-21.5                       | 1.5                                   | 1-1-1                            | SPT         | 25                         |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
| 30<br>35<br>40<br>45<br>50      |       | Very loose to loose, gray, wet, silty sand.                  | 6          | 25.0-26.5                       | 0.0                                   | 1-1-1                            | SPT         | 30<br>35<br>40<br>45<br>50 |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|                                 |       |                                                              | 7          | 30.0-31.5                       | 1.0                                   | 2-1-1                            | SPT         |                            |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|                                 |       |                                                              | 8          | 35.0-36.5                       | 1.5                                   | 3-2-3                            | SPT         |                            |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|                                 |       |                                                              | 9          | 40.0-41.5                       | 1.5                                   | 4-2-6                            | SPT         |                            |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |
|                                 |       |                                                              | 10         | 45.0-46.5                       | 1.0                                   | 4-4-4                            | SPT         |                            |
|                                 |       |                                                              |            |                                 |                                       |                                  |             |                            |





# **APPENDIX C**

## **LABORATORY DATA SHEETS**



Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-1, 2.0'-3.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min) 210

Particle Shape Angular

Particle Hardness Weathered and Friable

Sample Dry Mass (g) 295.54

Moisture Content (%) 19.0

Project Number 178568003

Lab ID 235

Date Received 02-06-2019

Preparation Date 02-06-2019

Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| 3/4"       | 0.00           | 0.0        | 100.0     |
| 3/8"       | 1.78           | 0.6        | 99.4      |
| No. 4      | 3.92           | 1.3        | 98.1      |
| No. 10     | 3.76           | 1.3        | 96.8      |
| No. 40     | 6.35           | 2.1        | 94.7      |
| No. 200    | 124.01         | 42.0       | 52.7      |
| Pan        | 155.72         | 52.7       | ---       |

% Gravel 3.2

% Sand 44.1

% Fines 52.7

Fines Classification N/A

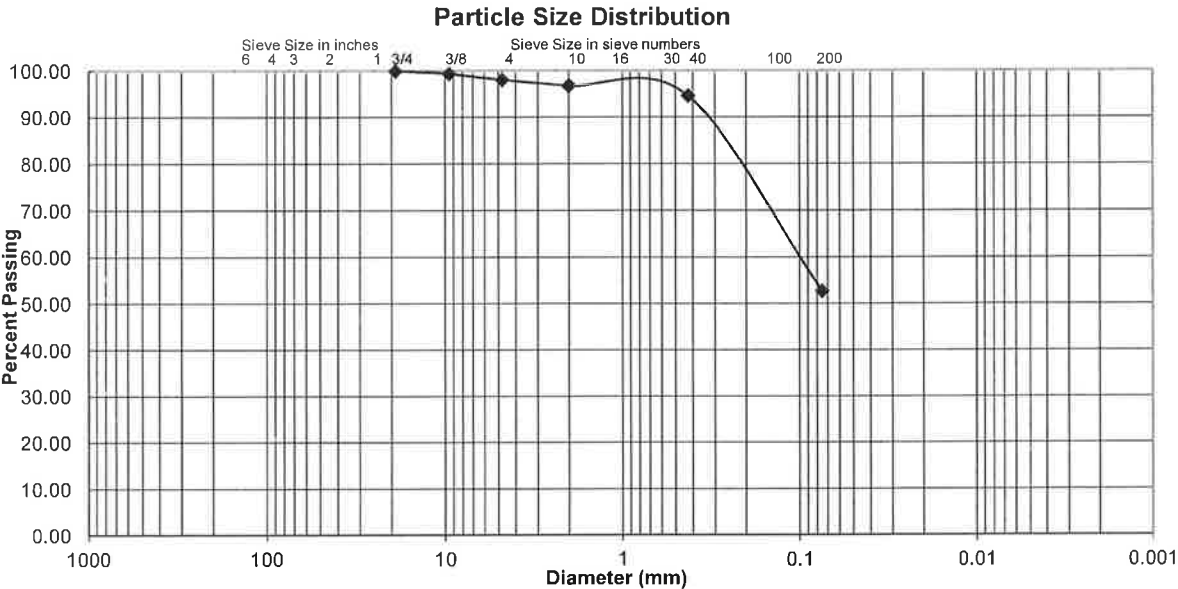
D<sub>10</sub> (mm) N/A

D<sub>30</sub> (mm) N/A

D<sub>60</sub> (mm) N/A

Cu N/A

Cc N/A



Comments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Reviewed By RJ



Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-1, 5.0'-6.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min) 220

Particle Shape N/A

Particle Hardness N/A

Sample Dry Mass (g) 239.45

Moisture Content (%) 21.8

Project Number 178568003

Lab ID 236

Date Received 02-06-2019

Preparation Date 02-06-2019

Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| No. 10     | 0.00           | 0.0        | 100.0     |
| No. 40     | 0.42           | 0.2        | 99.8      |
| No. 200    | 63.11          | 26.4       | 73.5      |
| Pan        | 175.92         | 73.5       | ---       |

% Gravel 0.0

% Sand 26.5

% Fines 73.5

Fines Classification N/A

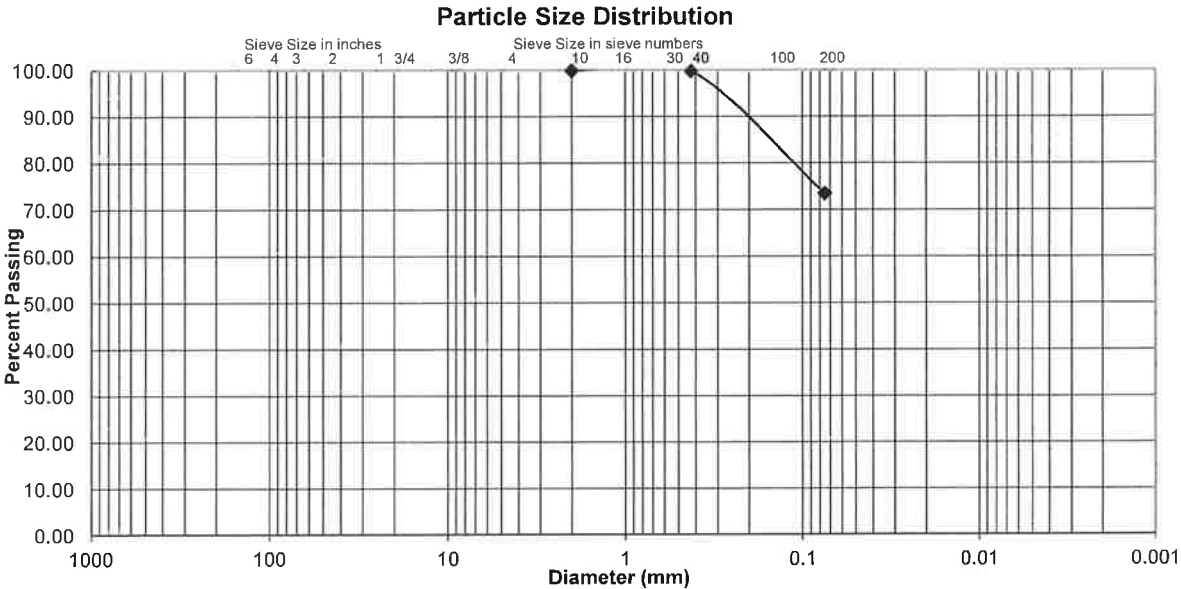
D<sub>10</sub> (mm) N/A

D<sub>30</sub> (mm) N/A

D<sub>60</sub> (mm) N/A

Cu N/A

Cc N/A



Comments

Reviewed By RJ



# Summary of Soil Tests

Project Name Bridging KY - 022B00006N Project Number 178568003  
Source 022B00006N-1, 10.0'-11.5', 15.0'-16.5' Lab ID 237  
Sample Type SPT Composite Date Received 2-6-19  
Date Reported 2-14-19

## Test Results

### Natural Moisture Content

Test Not Performed  
Moisture Content (%): N/A

### Atterberg Limits

Test Method: AASHTO T 89 & T 90  
Prepared: Dry  
Liquid Limit: 23  
Plastic Limit: 19  
Plasticity Index: 4  
Activity Index: 0.3

### Particle Size Analysis

Preparation Method: AASHTO T 87  
Gradation Method: AASHTO T 88  
Hydrometer Method: AASHTO T 88

| Particle Size |       | % Passing |
|---------------|-------|-----------|
| Sieve Size    | (mm)  |           |
|               | N/A   |           |
|               | N/A   |           |
| 2"            | 50    | 100.0     |
| 1"            | 25    | 93.3      |
| 3/4"          | 19    | 93.3      |
| 3/8"          | 9.5   | 91.1      |
| No. 4         | 4.75  | 90.7      |
| No. 10        | 2     | 88.3      |
| No. 40        | 0.425 | 86.4      |
| No. 200       | 0.075 | 58.3      |
|               | 0.02  | 33.5      |
|               | 0.005 | 19.0      |
|               | 0.002 | 13.4      |
| estimated     | 0.001 | 10.1      |

Plus 3 in. material, not included: 0 (%)

| Range       | ASTM (%) | AASHTO (%) |
|-------------|----------|------------|
| Gravel      | 9.3      | 11.7       |
| Coarse Sand | 2.4      | 1.9        |
| Medium Sand | 1.9      | ---        |
| Fine Sand   | 28.1     | 28.1       |
| Silt        | 39.3     | 44.9       |
| Clay        | 19.0     | 13.4       |

### Moisture-Density Relationship

Test Not Performed  
Maximum Dry Density (lb/ft<sup>3</sup>): N/A  
Maximum Dry Density (kg/m<sup>3</sup>): N/A  
Optimum Moisture Content (%): N/A  
Over Size Correction %: N/A

### California Bearing Ratio

Test Not Performed  
Bearing Ratio (%): N/A  
Compacted Dry Density (lb/ft<sup>3</sup>): N/A  
Compacted Moisture Content (%): N/A

### Specific Gravity

Test Method: AASHTO T 100  
Prepared: Dry  
Particle Size: No. 10  
Specific Gravity at 20° Celsius: 2.64

### Classification

Unified Group Symbol: CL-ML  
Group Name: Sandy silty clay  
AASHTO Classification: A-4 (0)

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Reviewed By RJ





Particle-Size Analysis of Soils  
AASHTO T 88

Project Name     Bridging KY - 022B00006N

Source            022B00006N-1, 10.0'-11.5', 15.0'-16.5'

Project Number   178568003

Lab ID             237

Sieve analysis for the Portion Coarser than the No. 10 Sieve

Test Method       AASHTO T 88

Prepared using   AASHTO T 87

Particle Shape     Rounded and Angular

Particle Hardness: Hard and Durable

Tested By         RC

Test Date         02-07-2019

Date Received   02-06-2019

| Sieve Size | % Passing |
|------------|-----------|
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
| 2"         | 100.0     |
| 1"         | 93.3      |
| 3/4"       | 93.3      |
| 3/8"       | 91.1      |
| No. 4      | 90.7      |
| No. 10     | 88.3      |

Maximum Particle size: 2" Sieve

Analysis for the portion Finer than the No. 10 Sieve

Analysis Based on -3 inch fraction only

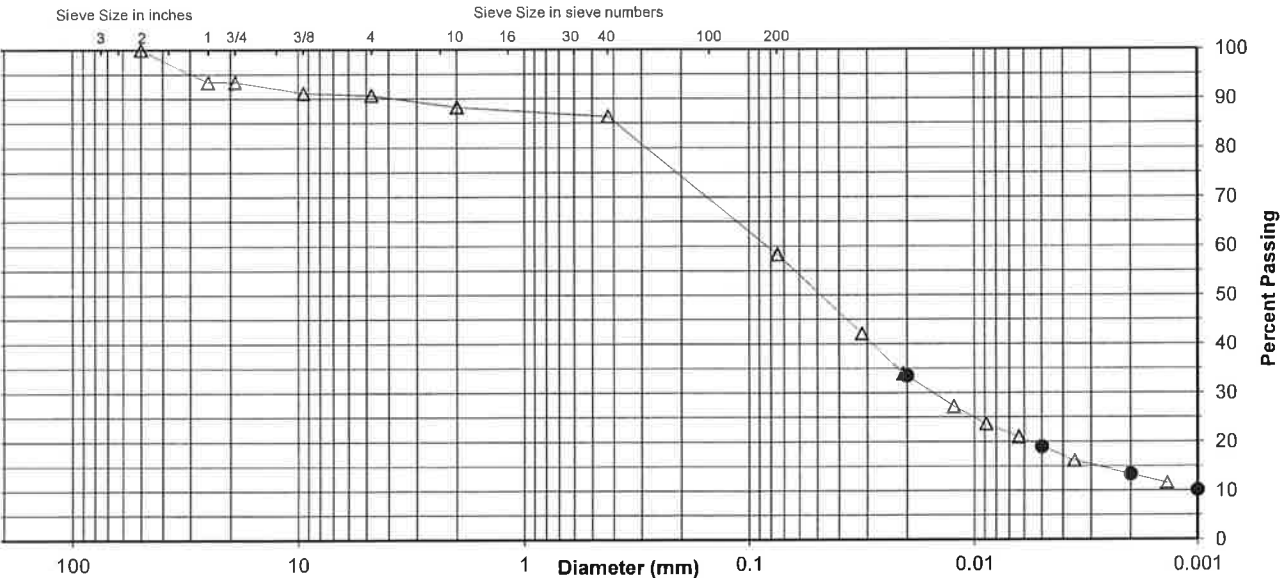
Specific Gravity     2.64

Dispersed using Apparatus A - Mechanical, for 1 minute

|          |      |
|----------|------|
| No. 40   | 86.4 |
| No. 200  | 58.3 |
| 0.02 mm  | 33.5 |
| 0.005 mm | 19.0 |
| 0.002 mm | 13.4 |
| 0.001 mm | 10.1 |

Particle Size Distribution

|        |                      |                    |                |                    |                   |              |              |
|--------|----------------------|--------------------|----------------|--------------------|-------------------|--------------|--------------|
| ASTM   | Coarse Gravel<br>6.7 | Fine Gravel<br>2.6 | C. Sand<br>2.4 | Medium Sand<br>1.9 | Fine Sand<br>28.1 | Silt<br>39.3 | Clay<br>19.0 |
| AASHTO | Gravel<br>11.7       |                    |                | Coarse Sand<br>1.9 | Fine Sand<br>28.1 | Silt<br>44.9 | Clay<br>13.4 |



Comments \_\_\_\_\_

Reviewed By RJ

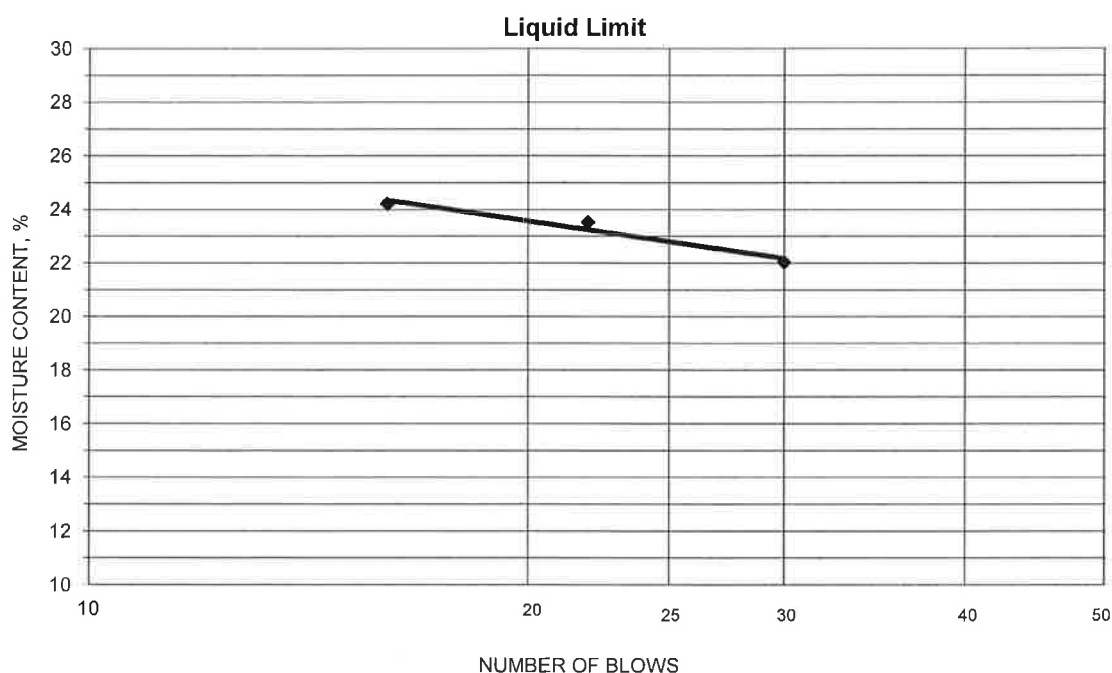


# ATTERBERG LIMITS

Project Bridging KY - 022B00006N  
Source 022B00006N-1, 10.0'-11.5', 15.0'-16.5'  
Tested By KG Test Method AASHTO T 89 & T 90  
Test Date 02-11-2019 Prepared Dry

Project No. 178568003  
Lab ID 237  
% + No. 40 14  
Date Received 02-06-2019

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Number of Blows | Water Content (%) | Liquid Limit |
|----------------------------|----------------------------|---------------|-----------------|-------------------|--------------|
| 20.92                      | 19.00                      | 11.07         | 16              | 24.2              | 23           |
| 21.16                      | 19.27                      | 11.24         | 22              | 23.5              |              |
| 21.37                      | 19.53                      | 11.18         | 30              | 22.0              |              |
|                            |                            |               |                 |                   |              |



## PLASTIC LIMIT AND PLASTICITY INDEX

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Water Content (%) | Plastic Limit | Plasticity Index |
|----------------------------|----------------------------|---------------|-------------------|---------------|------------------|
| 17.92                      | 16.87                      | 11.21         | 18.6              | 19            | 4                |
| 18.55                      | 17.34                      | 10.93         | 18.9              |               |                  |

Remarks: \_\_\_\_\_

Reviewed By RJ



Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-1, 20.0'-21.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min) 230

Particle Shape Angular

Particle Hardness Weathered and Friable

Sample Dry Mass (g) 170.34

Moisture Content (%) 43.5

Project Number 178568003

Lab ID 240

Date Received 02-06-2019

Preparation Date 02-06-2019

Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| No. 4      | 0.00           | 0.0        | 100.0     |
| No. 10     | 0.03           | 0.0        | 100.0     |
| No. 40     | 0.73           | 0.4        | 99.6      |
| No. 200    | 10.66          | 6.3        | 93.3      |
| Pan        | 158.92         | 93.3       | ---       |

% Gravel 0.0

% Sand 6.7

% Fines 93.3

Fines Classification N/A

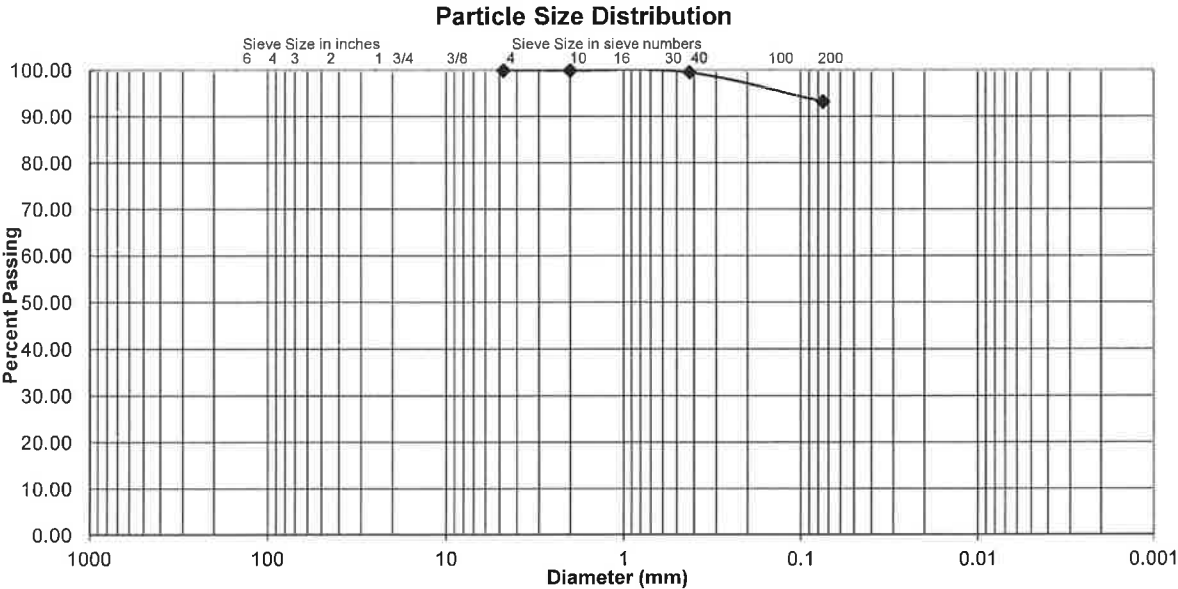
D<sub>10</sub> (mm) N/A

D<sub>30</sub> (mm) N/A

D<sub>60</sub> (mm) N/A

Cu N/A

Cc N/A



Comments

Reviewed By RJ



Gradation Analysis  
AASHTO T 88

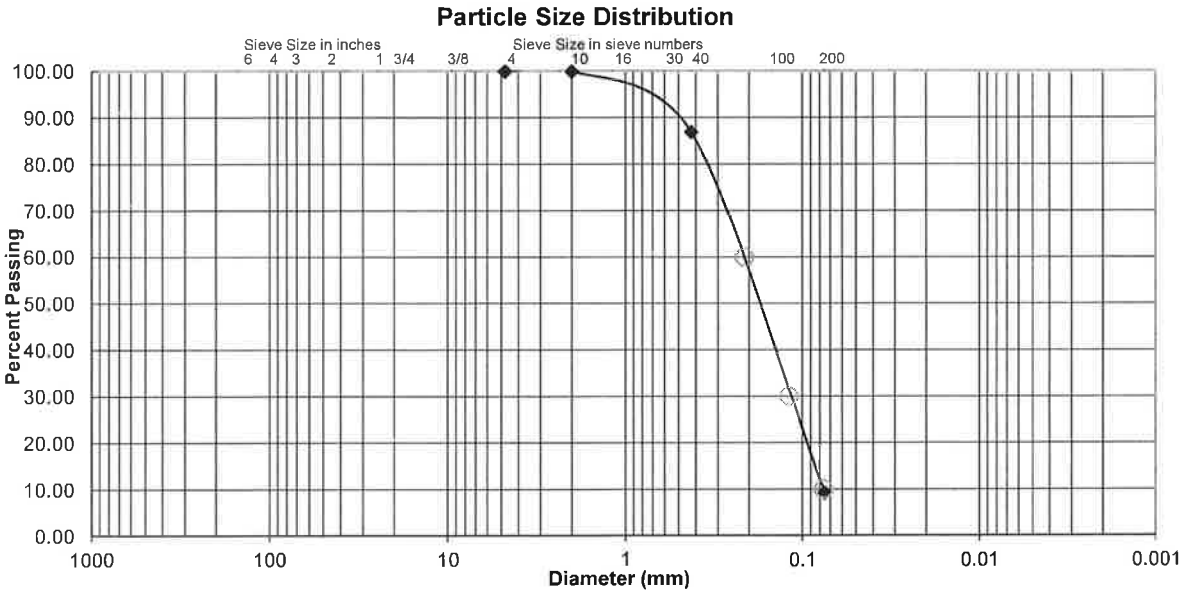
Project Name Bridging KY - 022B00006N  
Source 022B00006N-1, 30.0'-31.5'  
Preparation Method AASHTO T 11 Method A  
Soak Time (min) 240  
Particle Shape Angular  
Particle Hardness Weathered and Friable  
Sample Dry Mass (g) 326.34  
Moisture Content (%) 21.1

Project Number 178568003  
Lab ID 242  
Date Received 02-06-2019  
Preparation Date 02-06-2019  
Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| No. 4      | 0.00           | 0.0        | 100.0     |
| No. 10     | 0.18           | 0.1        | 99.9      |
| No. 40     | 42.61          | 13.1       | 86.9      |
| No. 200    | 253.16         | 77.6       | 9.3       |
| Pan        | 30.39          | 9.3        | ---       |

% Gravel 0.1  
% Sand 90.6  
% Fines 9.3  
Fines Classification N/A  
  
D<sub>10</sub> (mm) 0.0762  
D<sub>30</sub> (mm) 0.1191  
D<sub>60</sub> (mm) 0.2130  
  
Cu 2.80  
Cc 0.87



Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Reviewed By RJ



## Summary of Soil Tests

Project Name Bridging KY - 022B00006N Project Number 178568003  
Source 022B00006N-1, 35.0'-36.5', 40.0'-41.5' Lab ID 243  
Sample Type SPT Composite Date Received 2-6-19  
Date Reported 2-14-19

### Test Results

#### Natural Moisture Content

Test Not Performed  
Moisture Content (%): N/A

#### Atterberg Limits

Test Method: AASHTO T 89 & T 90  
Prepared: Dry  
Liquid Limit: NP  
Plastic Limit: NP  
Plasticity Index: NP  
Activity Index: N/A

#### Particle Size Analysis

Preparation Method: AASHTO T 87  
Gradation Method: AASHTO T 88  
Hydrometer Method: AASHTO T 88

| Particle Size |       | %<br>Passing |
|---------------|-------|--------------|
| Sieve Size    | (mm)  |              |
|               | N/A   |              |
|               | N/A   |              |
|               | N/A   |              |
|               | N/A   |              |
|               | N/A   |              |
| 3/8"          | 9.5   | 100.0        |
| No. 4         | 4.75  | 99.7         |
| No. 10        | 2     | 98.6         |
| No. 40        | 0.425 | 85.6         |
| No. 200       | 0.075 | 25.3         |
|               | 0.02  | 15.4         |
|               | 0.005 | 10.6         |
|               | 0.002 | 7.3          |
| estimated     | 0.001 | 5.4          |

Plus 3 in. material, not included: 0 (%)

| Range       | ASTM<br>(%) | AASHTO<br>(%) |
|-------------|-------------|---------------|
| Gravel      | 0.3         | 1.4           |
| Coarse Sand | 1.1         | 13.0          |
| Medium Sand | 13.0        | ---           |
| Fine Sand   | 60.3        | 60.3          |
| Silt        | 14.7        | 18.0          |
| Clay        | 10.6        | 7.3           |

#### Moisture-Density Relationship

Test Not Performed  
Maximum Dry Density (lb/ft<sup>3</sup>): N/A  
Maximum Dry Density (kg/m<sup>3</sup>): N/A  
Optimum Moisture Content (%): N/A  
Over Size Correction %: N/A

#### California Bearing Ratio

Test Not Performed  
Bearing Ratio (%): N/A  
Compacted Dry Density (lb/ft<sup>3</sup>): N/A  
Compacted Moisture Content (%): N/A

#### Specific Gravity

Test Method: AASHTO T 100  
Prepared: Dry  
Particle Size: No. 10  
Specific Gravity at 20° Celsius: 2.62

#### Classification

Unified Group Symbol: SM  
Group Name: Silty sand  
AASHTO Classification: A-2-4 (0)

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Reviewed By RJ



Particle-Size Analysis of Soils  
AASHTO T 88

Project Name Bridging KY - 022B00006N  
Source 022B00006N-1, 35.0'-36.5', 40.0'-41.5'

Project Number 178568003  
Lab ID 243

Sieve analysis for the Portion Coarser than the No. 10 Sieve

Test Method AASHTO T 88  
Prepared using AASHTO T 87  
  
Particle Shape Angular  
Particle Hardness: Weathered and Friable  
  
Tested By RC  
Test Date 02-07-2019  
Date Received 02-06-2019

| Sieve Size | % Passing |
|------------|-----------|
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
| 3/8"       | 100.0     |
| No. 4      | 99.7      |
| No. 10     | 98.6      |

Maximum Particle size: 3/8" Sieve

Analysis for the portion Finer than the No. 10 Sieve

Analysis Based on -3 inch fraction only

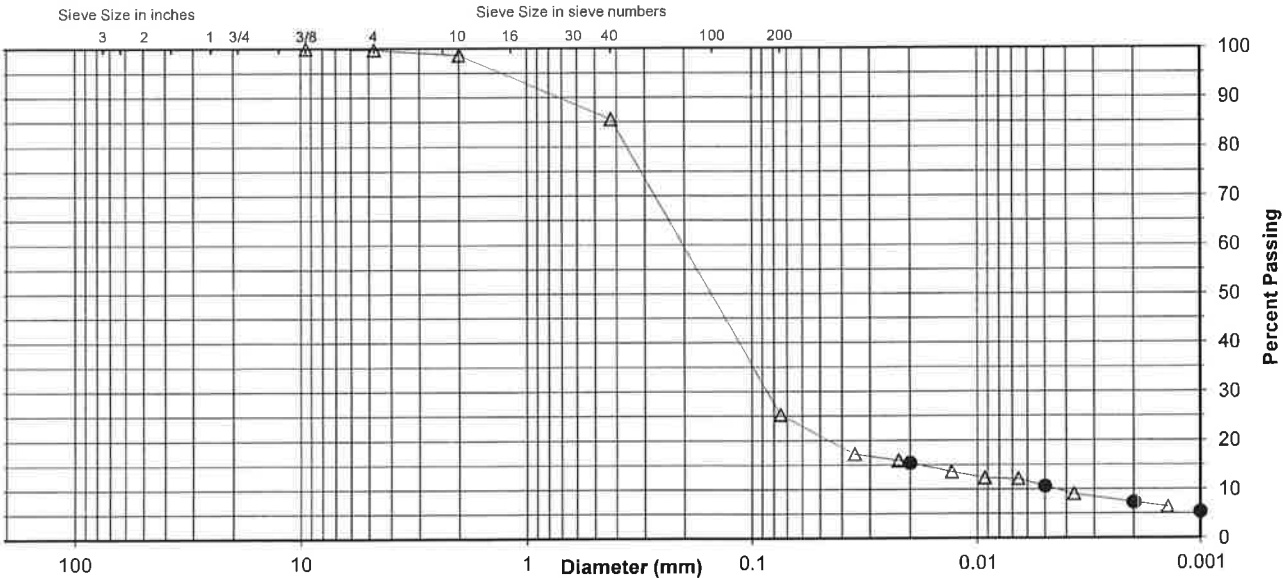
Specific Gravity 2.62

Dispersed using Apparatus A - Mechanical, for 1 minute

|          |      |
|----------|------|
| No. 40   | 85.6 |
| No. 200  | 25.3 |
| 0.02 mm  | 15.4 |
| 0.005 mm | 10.6 |
| 0.002 mm | 7.3  |
| 0.001 mm | 5.4  |

Particle Size Distribution

|        |               |             |             |             |           |      |      |
|--------|---------------|-------------|-------------|-------------|-----------|------|------|
| ASTM   | Coarse Gravel | Fine Gravel | C. Sand     | Medium Sand | Fine Sand | Silt | Clay |
|        | 0.0           | 0.3         | 1.1         | 13.0        | 60.3      | 14.7 | 10.6 |
| AASHTO | Gravel        |             | Coarse Sand | Fine Sand   | Silt      | Clay |      |
|        | 1.4           |             | 13.0        | 60.3        | 16.0      | 7.3  |      |



Comments \_\_\_\_\_

Reviewed By RJ



ATTERBERG LIMITS

Project  
Source

Bridging KY - 022B00006N  
022B00006N-1, 35.0'-36.5', 40.0'-41.5'

Project No.  
Lab ID  
% + No. 40  
Date Received

178568003  
243  
14  
02-06-2019

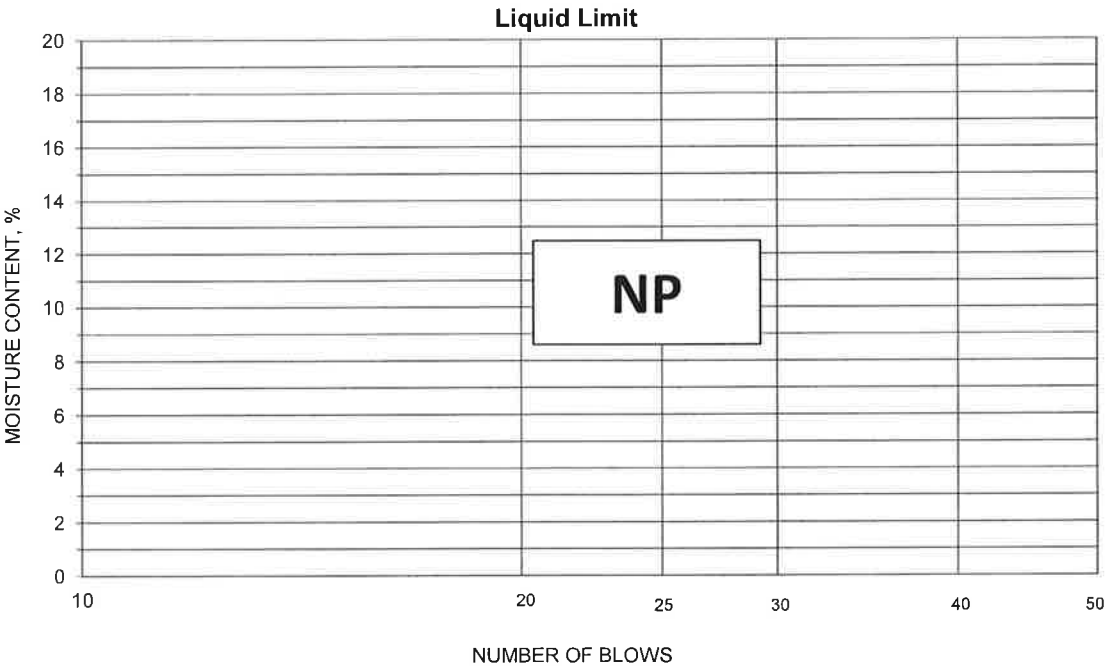
Tested By  
Test Date

KG  
02-07-2019

Test Method  
Prepared

AASHTO T 89 & T 90  
Dry

| Wet Soil and<br>Tare Mass<br>(g) | Dry Soil and<br>Tare Mass<br>(g) | Tare Mass<br>(g) | Number of<br>Blows | Water Content<br>(%) | Liquid Limit |
|----------------------------------|----------------------------------|------------------|--------------------|----------------------|--------------|
|                                  |                                  |                  |                    |                      |              |
|                                  |                                  |                  |                    |                      |              |
|                                  |                                  |                  |                    |                      |              |
|                                  |                                  |                  |                    |                      |              |
|                                  |                                  |                  |                    |                      |              |



PLASTIC LIMIT AND PLASTICITY INDEX

| Wet Soil and<br>Tare Mass<br>(g) | Dry Soil and<br>Tare Mass<br>(g) | Tare Mass<br>(g) | Water<br>Content<br>(%) | Plastic Limit | Plasticity Index |
|----------------------------------|----------------------------------|------------------|-------------------------|---------------|------------------|
|                                  |                                  |                  |                         |               |                  |
|                                  |                                  |                  |                         |               |                  |

Remarks:

Reviewed By



Gradation Analysis  
AASHTO T 88

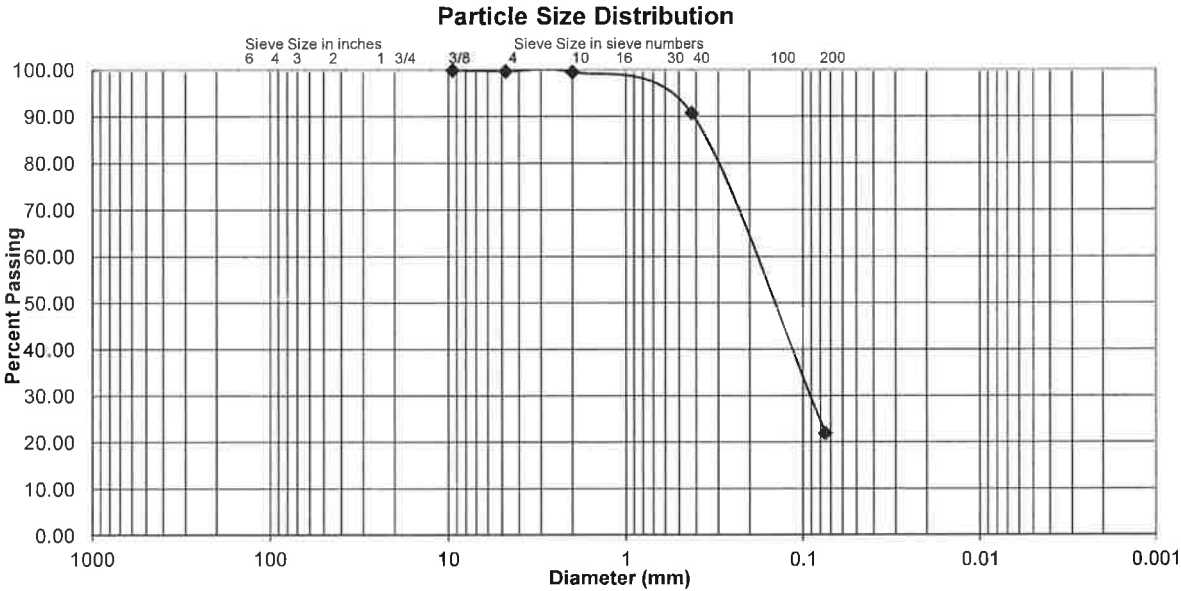
Project Name Bridging KY - 022B00006N  
Source 022B00006N-1, 50.51.5'  
Preparation Method AASHTO T 11 Method A  
Soak Time (min) 250  
Particle Shape Angular  
Particle Hardness Weathered and Friable  
Sample Dry Mass (g) 230.76  
Moisture Content (%) 22.5

Project Number 178568003  
Lab ID 247  
Date Received 02-06-2019  
Preparation Date 02-06-2019  
Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| 3/8"       | 0.00           | 0.0        | 100.0     |
| No. 4      | 0.46           | 0.2        | 99.8      |
| No. 10     | 0.50           | 0.2        | 99.6      |
| No. 40     | 20.43          | 8.9        | 90.7      |
| No. 200    | 158.72         | 68.8       | 21.9      |
| Pan        | 50.65          | 21.9       | ---       |

% Gravel 0.4  
% Sand 77.6  
% Fines 21.9  
Fines Classification N/A  
  
D<sub>10</sub> (mm) N/A  
D<sub>30</sub> (mm) N/A  
D<sub>60</sub> (mm) N/A  
  
Cu N/A  
Cc N/A



Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Reviewed By RJ





Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-2, 2.0'-3.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min) 260

Particle Shape Angular

Particle Hardness Hard and Durable

Sample Dry Mass (g) 265.30

Moisture Content (%) 15.0

Project Number 178568003

Lab ID 248

Date Received 02-06-2019

Preparation Date 02-06-2019

Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| 1"         | 0.00           | 0.0        | 100.0     |
| 3/4"       | 19.85          | 7.5        | 92.5      |
| 3/8"       | 29.29          | 11.0       | 81.5      |
| No. 4      | 17.13          | 6.5        | 75.0      |
| No. 10     | 25.29          | 9.5        | 65.5      |
| No. 40     | 26.35          | 9.9        | 55.6      |
| No. 200    | 38.88          | 14.7       | 40.9      |
| Pan        | 108.51         | 40.9       | ---       |

% Gravel 34.5

% Sand 24.6

% Fines 40.9

Fines Classification N/A

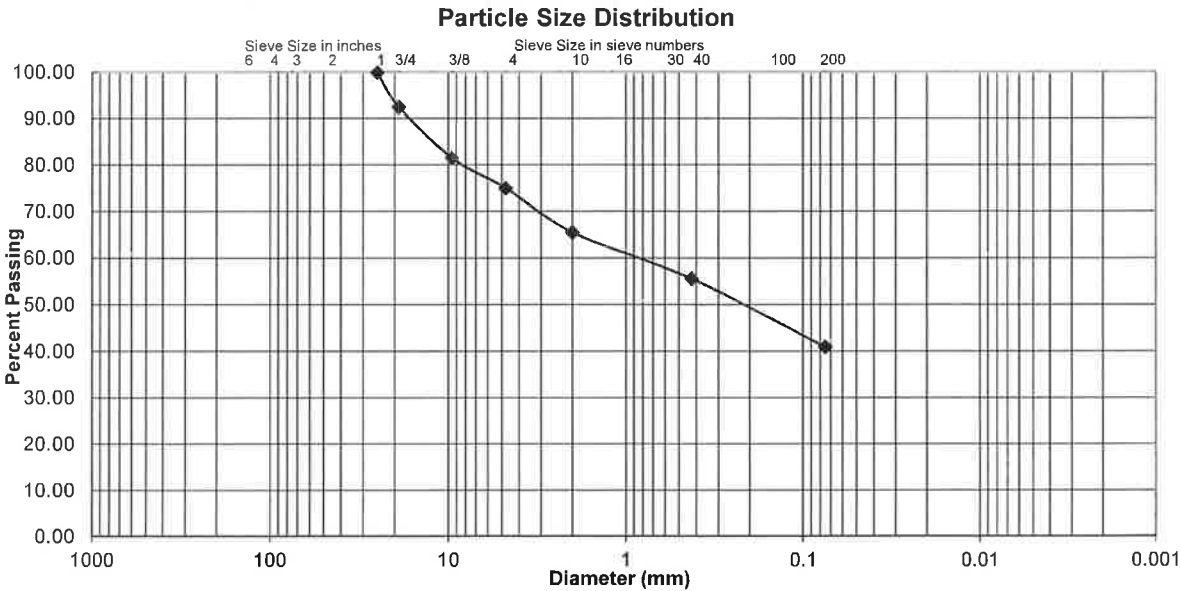
D<sub>10</sub> (mm) N/A

D<sub>30</sub> (mm) N/A

D<sub>60</sub> (mm) N/A

Cu N/A

Cc N/A



Comments

Reviewed By RJ



## Summary of Soil Tests

Project Name Bridging KY - 022B00006N Project Number 178568003  
Source 022B00006N-2, 5.0'-6.5', 10.0'-11.5' Lab ID 249  
Sample Type SPT Composite Date Received 2-6-19  
Date Reported 2-14-19

### Test Results

#### Natural Moisture Content

Test Not Performed  
Moisture Content (%): N/A

#### Atterberg Limits

Test Method: AASHTO T 89 & T 90  
Prepared: Dry  
Liquid Limit: 33  
Plastic Limit: 21  
Plasticity Index: 12  
Activity Index: 1.0

#### Particle Size Analysis

Preparation Method: AASHTO T 87  
Gradation Method: AASHTO T 88  
Hydrometer Method: AASHTO T 88

| Particle Size |       | % Passing |
|---------------|-------|-----------|
| Sieve Size    | (mm)  |           |
|               | N/A   |           |
|               | N/A   |           |
|               | N/A   |           |
| 1"            | 25    | 100.0     |
| 3/4"          | 19    | 93.6      |
| 3/8"          | 9.5   | 86.1      |
| No. 4         | 4.75  | 78.3      |
| No. 10        | 2     | 63.7      |
| No. 40        | 0.425 | 53.9      |
| No. 200       | 0.075 | 37.5      |
|               | 0.02  | 27.3      |
|               | 0.005 | 17.8      |
|               | 0.002 | 11.7      |
| estimated     | 0.001 | 7.8       |

Plus 3 in. material, not included: 0 (%)

| Range       | ASTM (%) | AASHTO (%) |
|-------------|----------|------------|
| Gravel      | 21.7     | 36.3       |
| Coarse Sand | 14.6     | 9.8        |
| Medium Sand | 9.8      | ---        |
| Fine Sand   | 16.4     | 16.4       |
| Silt        | 19.7     | 25.8       |
| Clay        | 17.8     | 11.7       |

#### Moisture-Density Relationship

Test Not Performed  
Maximum Dry Density (lb/ft<sup>3</sup>): N/A  
Maximum Dry Density (kg/m<sup>3</sup>): N/A  
Optimum Moisture Content (%): N/A  
Over Size Correction %: N/A

#### California Bearing Ratio

Test Not Performed  
Bearing Ratio (%): N/A  
Compacted Dry Density (lb/ft<sup>3</sup>): N/A  
Compacted Moisture Content (%): N/A

#### Specific Gravity

Test Method: AASHTO T 100  
Prepared: Dry  
Particle Size: No. 10  
Specific Gravity at 20° Celsius: 2.65

#### Classification

Unified Group Symbol: SC  
Group Name: Clayey sand with gravel  
AASHTO Classification: A-6 (1)

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Reviewed By RJ



Particle-Size Analysis of Soils  
AASHTO T 88

Project Name Bridging KY - 022B00006N  
Source 022B00006N-2, 5.0'-6.5', 10.0'-11.5'

Project Number 178568003  
Lab ID 249

Sieve analysis for the Portion Coarser than the No. 10 Sieve

Test Method AASHTO T 88  
Prepared using AASHTO T 87  
  
Particle Shape Rounded and Angular  
Particle Hardness: Hard and Durable  
  
Tested By RC  
Test Date 02-07-2019  
Date Received 02-06-2019

| Sieve Size | % Passing |
|------------|-----------|
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
| 1"         | 100.0     |
| 3/4"       | 93.6      |
| 3/8"       | 86.1      |
| No. 4      | 78.3      |
| No. 10     | 63.7      |

Maximum Particle size: 1" Sieve

Analysis for the portion Finer than the No. 10 Sieve

Analysis Based on -3 inch fraction only

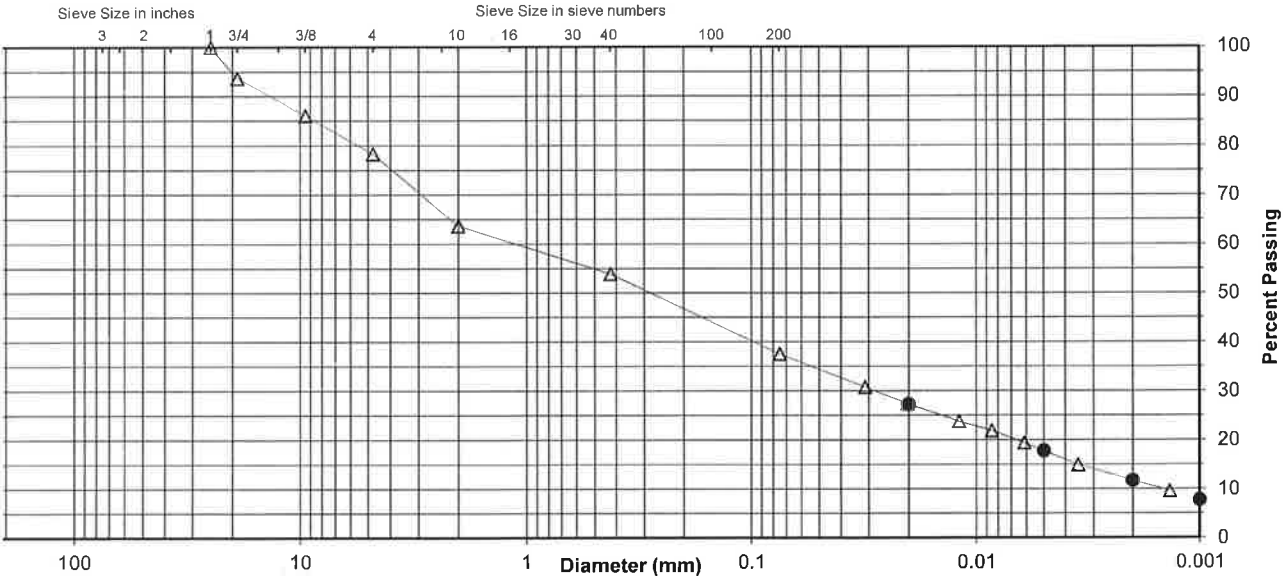
Specific Gravity 2.65

Dispersed using Apparatus A - Mechanical, for 1 minute

|          |      |
|----------|------|
| No. 40   | 53.9 |
| No. 200  | 37.5 |
| 0.02 mm  | 27.3 |
| 0.005 mm | 17.8 |
| 0.002 mm | 11.7 |
| 0.001 mm | 7.8  |

Particle Size Distribution

| ASTM   | Coarse Gravel | Fine Gravel | C. Sand     | Medium Sand | Fine Sand | Silt | Clay |
|--------|---------------|-------------|-------------|-------------|-----------|------|------|
|        | 6.4           | 15.3        | 14.6        | 9.8         | 16.4      | 19.7 | 17.8 |
| AASHTO | Gravel        |             | Coarse Sand |             | Fine Sand | Silt | Clay |
|        | 36.3          |             | 9.8         |             | 16.4      | 25.8 | 11.7 |



Comments \_\_\_\_\_

Reviewed By RJ

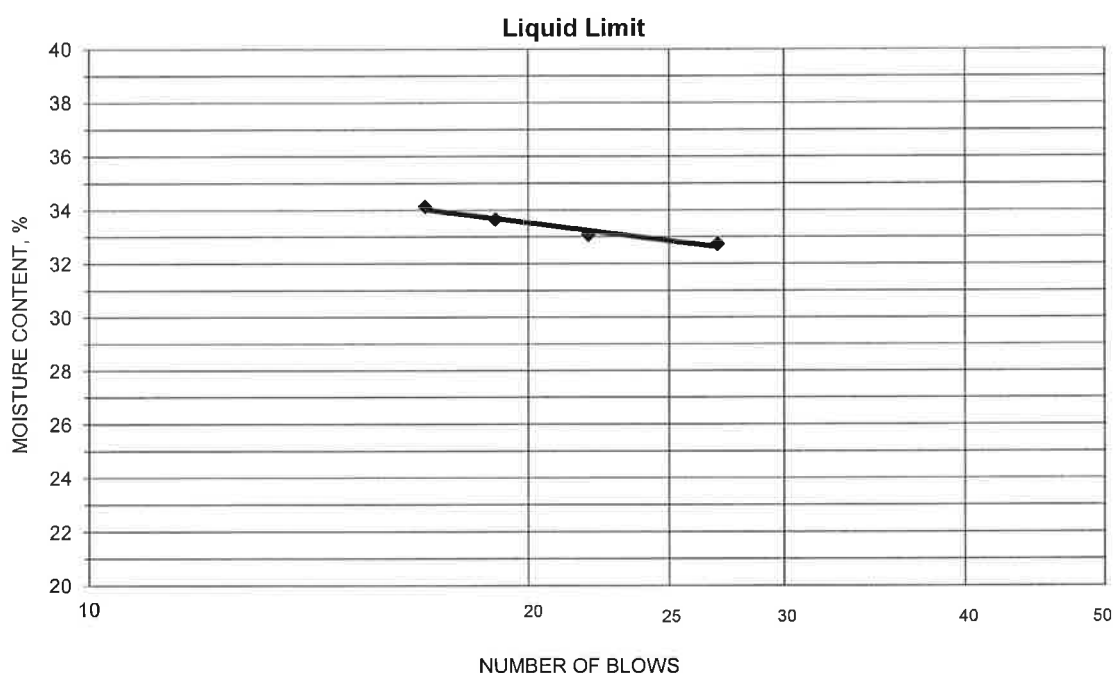


# ATTERBERG LIMITS

Project Bridging KY - 022B00006N  
Source 022B00006N-2, 5.0'-6.5', 10.0'-11.5'  
Tested By KG Test Method AASHTO T 89 & T 90  
Test Date 02-11-2019 Prepared Dry

Project No. 178568003  
Lab ID 249  
% + No. 40 46  
Date Received 02-06-2019

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Number of Blows | Water Content (%) | Liquid Limit |
|----------------------------|----------------------------|---------------|-----------------|-------------------|--------------|
| 19.26                      | 17.26                      | 11.15         | 27              | 32.7              | 33           |
| 19.46                      | 17.38                      | 11.09         | 22              | 33.1              |              |
| 18.02                      | 16.23                      | 10.91         | 19              | 33.6              |              |
| 19.51                      | 17.37                      | 11.10         | 17              | 34.1              |              |
|                            |                            |               |                 |                   |              |



## PLASTIC LIMIT AND PLASTICITY INDEX

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Water Content (%) | Plastic Limit | Plasticity Index |
|----------------------------|----------------------------|---------------|-------------------|---------------|------------------|
| 20.19                      | 18.65                      | 11.35         | 21.1              | 21            | 12               |
| 19.61                      | 18.20                      | 11.47         | 21.0              |               |                  |

Remarks: \_\_\_\_\_

Reviewed By RJ



Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-2, 15.0'-16.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min) 270

Particle Shape Angular

Particle Hardness Weathered and Friable

Sample Dry Mass (g) 191.02

Moisture Content (%) 27.2

Project Number 178568003

Lab ID 252

Date Received 02-06-2019

Preparation Date 02-06-2019

Test Date 02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| 3/4"       | 0.00           | 0.0        | 100.0     |
| 3/8"       | 2.41           | 1.3        | 98.7      |
| No. 4      | 3.22           | 1.7        | 97.1      |
| No. 10     | 2.55           | 1.3        | 95.7      |
| No. 40     | 4.44           | 2.3        | 93.4      |
| No. 200    | 21.69          | 11.4       | 82.0      |
| Pan        | 156.71         | 82.0       | ---       |

% Gravel 4.3

% Sand 13.7

% Fines 82.0

Fines Classification N/A

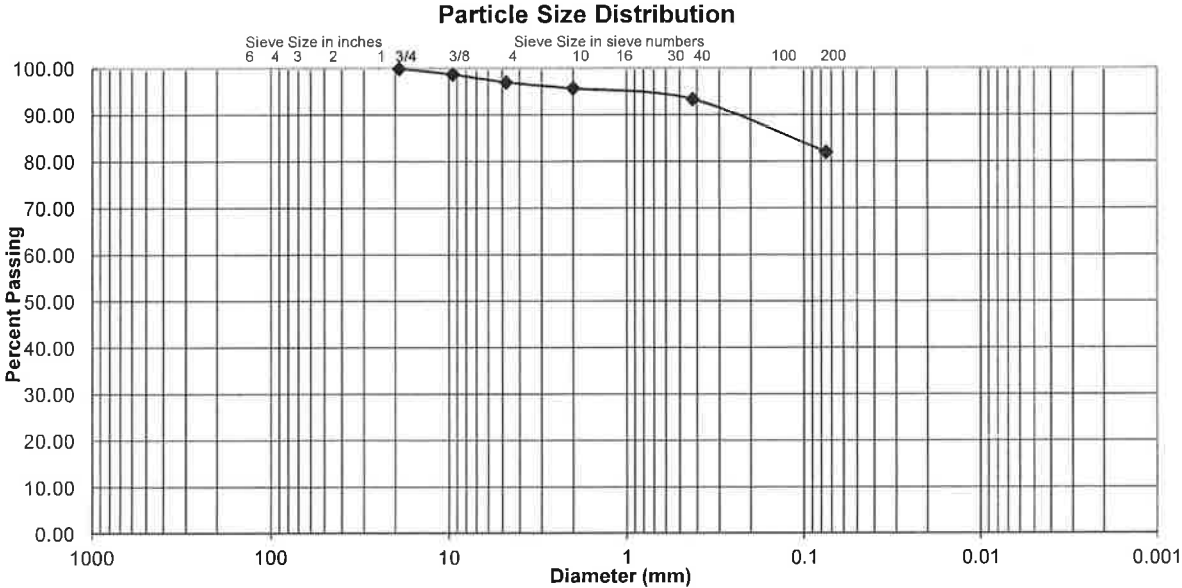
D<sub>10</sub> (mm) N/A

D<sub>30</sub> (mm) N/A

D<sub>60</sub> (mm) N/A

Cu N/A

Cc N/A



Comments

Reviewed By RJ



Gradation Analysis  
AASHTO T 88

Project Name Bridging KY - 022B00006N

Source 022B00006N-2, 20.0'-21.5'

Preparation Method AASHTO T 11 Method A

Soak Time (min)280

Particle ShapeAngular

Particle HardnessWeathered and Friable

Sample Dry Mass (g)220.09

Moisture Content (%)34.3

Project Number178568003

Lab ID253

Date Received02-06-2019

Preparation Date02-06-2019

Test Date02-08-2019

Analysis based on total sample.

| Sieve Size | Grams Retained | % Retained | % Passing |
|------------|----------------|------------|-----------|
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
|            |                |            |           |
| 3/4"       | 0.00           | 0.0        | 100.0     |
| 3/8"       | 0.84           | 0.4        | 99.6      |
| No. 4      | 0.00           | 0.0        | 99.6      |
| No. 10     | 0.15           | 0.1        | 99.6      |
| No. 40     | 3.17           | 1.4        | 98.1      |
| No. 200    | 38.56          | 17.5       | 80.6      |
| Pan        | 177.37         | 80.6       | ---       |

% Gravel0.4

% Sand19.0

% Fines80.6

Fines ClassificationN/A

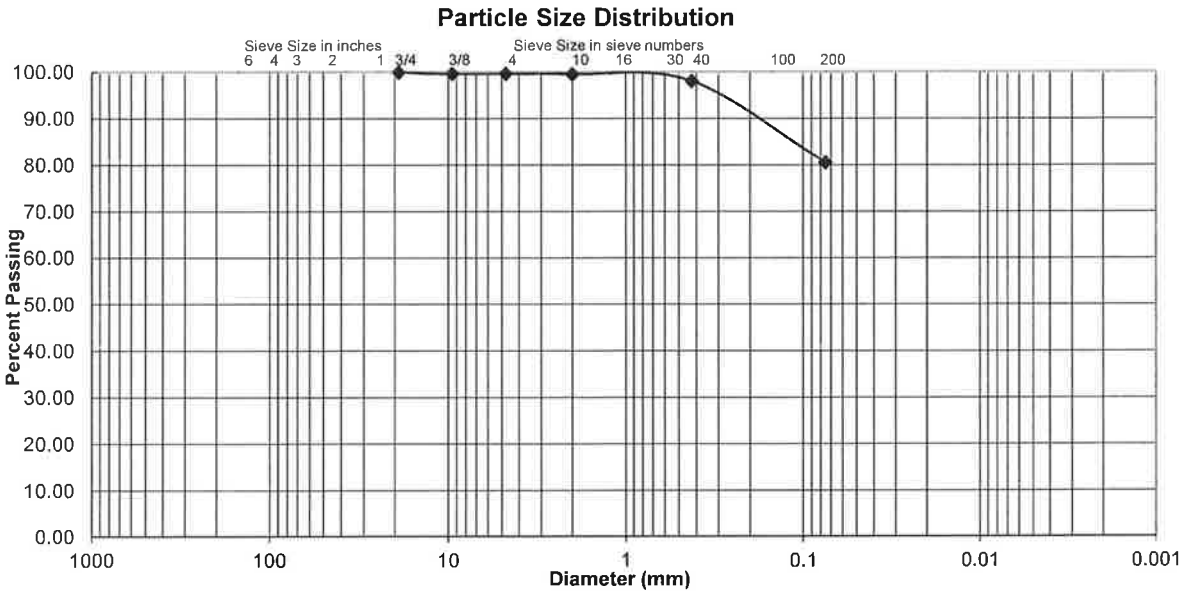
D<sub>10</sub> (mm)N/A

D<sub>30</sub> (mm)N/A

D<sub>60</sub> (mm)N/A

CuN/A

CcN/A



Comments

Reviewed By

RJ



## Summary of Soil Tests

Project Name Bridging KY - 022B00006N Project Number 178568003  
Source 022B00006N-2, 25.0'-26.5', 28.0'-29.0' Lab ID 254  
Sample Type SPT Composite Date Received 2-6-19  
Date Reported 2-14-19

## Test Results

**Natural Moisture Content**

Test Not Performed

Moisture Content (%): N/A**Atterberg Limits**

Test Method: AASHTO T 89 &amp; T 90

Prepared: Dry

Liquid Limit: NP  
Plastic Limit: NP  
Plasticity Index: NP  
Activity Index: N/A

**Particle Size Analysis**

Preparation Method: AASHTO T 87

Gradation Method: AASHTO T 88

Hydrometer Method: AASHTO T 88

| Particle Size |       | %       |
|---------------|-------|---------|
| Sieve Size    | (mm)  | Passing |
|               | N/A   |         |
|               | N/A   |         |
|               | N/A   |         |
|               | N/A   |         |
| 3/4"          | 19    | 100.0   |
| 3/8"          | 9.5   | 98.9    |
| No. 4         | 4.75  | 93.9    |
| No. 10        | 2     | 88.7    |
| No. 40        | 0.425 | 78.1    |
| No. 200       | 0.075 | 26.2    |
|               | 0.02  | 17.5    |
|               | 0.005 | 9.7     |
|               | 0.002 | 6.3     |
| estimated     | 0.001 | 4.7     |

Plus 3 in. material, not included: 0 (%)

| Range       | ASTM (%) | AASHTO (%) |
|-------------|----------|------------|
| Gravel      | 6.1      | 11.3       |
| Coarse Sand | 5.2      | 10.6       |
| Medium Sand | 10.6     | ---        |
| Fine Sand   | 51.9     | 51.9       |
| Silt        | 16.5     | 19.9       |
| Clay        | 9.7      | 6.3        |

**Moisture-Density Relationship**

Test Not Performed

Maximum Dry Density (lb/ft<sup>3</sup>): N/A  
Maximum Dry Density (kg/m<sup>3</sup>): N/A  
Optimum Moisture Content (%): N/A  
Over Size Correction %: N/A

**California Bearing Ratio**

Test Not Performed

Bearing Ratio (%): N/A  
Compacted Dry Density (lb/ft<sup>3</sup>): N/A  
Compacted Moisture Content (%): N/A

**Specific Gravity**

Test Method: AASHTO T 100

Prepared: Dry

Particle Size: No. 10  
Specific Gravity at 20° Celsius: 2.65

**Classification**

Unified Group Symbol: SM  
Group Name: Silty sand

AASHTO Classification: A-2-4 (0)Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Reviewed By RJ



Particle-Size Analysis of Soils  
AASHTO T 88

Project Name      Bridging KY - 022B00006N

Source              022B00006N-2, 25.0'-26.5', 28.0'-29.0'

Project Number    178568003

Lab ID              254

Sieve analysis for the Portion Coarser than the No. 10 Sieve

Test Method      AASHTO T 88

Prepared using   AASHTO T 87

Particle Shape     Angular

Particle Hardness: Weathered and Friable

Tested By         RC

Test Date         02-07-2019

Date Received    02-06-2019

| Sieve Size | % Passing |
|------------|-----------|
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
|            |           |
| 3/4"       | 100.0     |
| 3/8"       | 98.9      |
| No. 4      | 93.9      |
| No. 10     | 88.7      |

Maximum Particle size: 3/4" Sieve

Analysis for the portion Finer than the No. 10 Sieve

Analysis Based on -3 inch fraction only

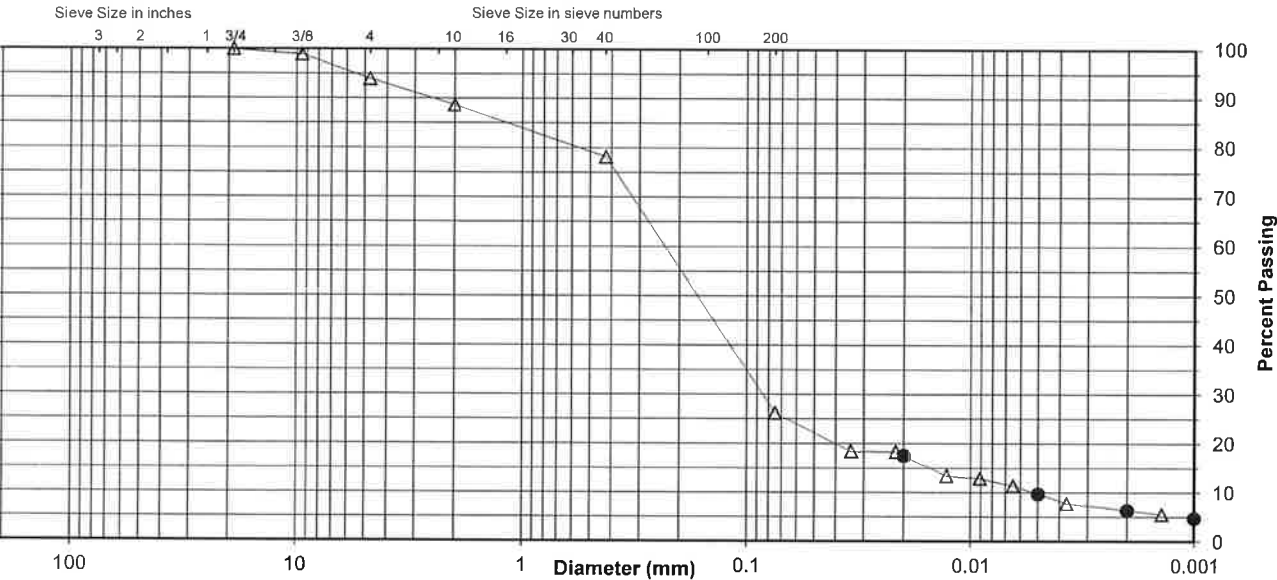
Specific Gravity    2.65

Dispersed using Apparatus A - Mechanical, for 1 minute

|          |      |
|----------|------|
| No. 40   | 78.1 |
| No. 200  | 26.2 |
| 0.02 mm  | 17.5 |
| 0.005 mm | 9.7  |
| 0.002 mm | 6.3  |
| 0.001 mm | 4.7  |

Particle Size Distribution

| ASTM   | Coarse Gravel | Fine Gravel | C. Sand     | Medium Sand | Fine Sand | Silt | Clay |
|--------|---------------|-------------|-------------|-------------|-----------|------|------|
|        | 0.0           | 6.1         | 5.2         | 10.6        | 51.9      | 16.5 | 9.7  |
| AASHTO | Gravel        |             | Coarse Sand |             | Fine Sand | Silt | Clay |
|        | 11.3          |             | 10.6        |             | 51.9      | 19.9 | 6.3  |



Comments \_\_\_\_\_

Reviewed By RJ





ATTERBERG LIMITS

Project

Bridging KY - 022B00006N

Source

022B00006N-2, 25.0'-26.5', 28.0'-29.0'

Tested By

KG

Test Method

AASHTO T 89 & T 90

Test Date

02-07-2019

Prepared

Dry

Project No.

178568003

Lab ID

254

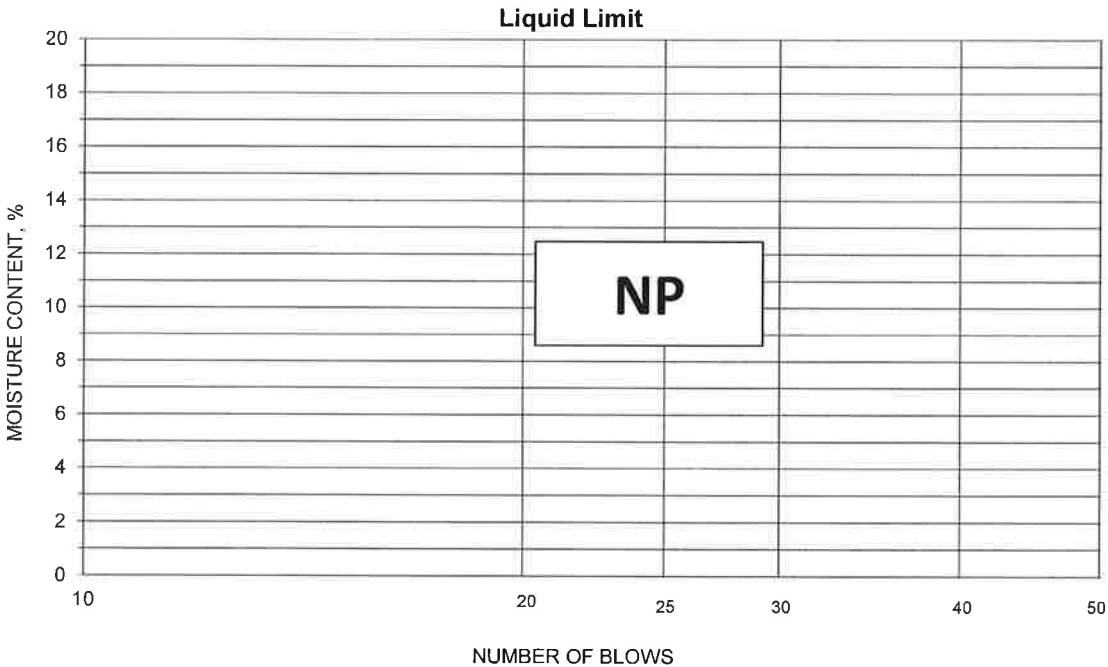
% + No. 40

22

Date Received

02-06-2019

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Number of Blows | Water Content (%) | Liquid Limit |
|----------------------------|----------------------------|---------------|-----------------|-------------------|--------------|
|                            |                            |               |                 |                   |              |
|                            |                            |               |                 |                   |              |
|                            |                            |               |                 |                   |              |
|                            |                            |               |                 |                   |              |
|                            |                            |               |                 |                   |              |



PLASTIC LIMIT AND PLASTICITY INDEX

| Wet Soil and Tare Mass (g) | Dry Soil and Tare Mass (g) | Tare Mass (g) | Water Content (%) | Plastic Limit | Plasticity Index |
|----------------------------|----------------------------|---------------|-------------------|---------------|------------------|
|                            |                            |               |                   |               |                  |
|                            |                            |               |                   |               |                  |

Remarks:

Reviewed By

RJ



Project Name Bridging KY - 022B000006N

**Moisture Content of Soil**  
AASHTO T 265

Project Number 178568003  
Tested By RC

Test Method AASHTO

|                                 |        |       |      |     |       |
|---------------------------------|--------|-------|------|-----|-------|
| Maximum Particle Size in Sample | No. 40 | No. 4 | 1/2" | 1"  | 2"    |
| Recommended Minimum Mass (g)    | 10     | 100   | 300  | 500 | 1,000 |

Material Type: Stratified, Laminated, Lensed, Homogeneous, Disturbed

| Source                     | Lab ID | Date Tested | Material Type | Maximum Particle Size | Material Excluded Amount | Size | Pass Min. Mass? (Y/N) | Can Weight (g) | Wet Soil & Can Weight (g) | Dry Soil & Can Weight (g) | Moisture Content (%) |
|----------------------------|--------|-------------|---------------|-----------------------|--------------------------|------|-----------------------|----------------|---------------------------|---------------------------|----------------------|
| 022B000006N-1, 2.0'-3.5'   | 235    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 289.96         | 641.69                    | 585.50                    | 19.0                 |
| 022B000006N-1, 5.0'-6.5'   | 236    | 2/6/19      | Dist          | No. 4                 |                          |      | Yes                   | 307.56         | 599.18                    | 547.01                    | 21.8                 |
| 022B000006N-1, 10.0'-11.5' | 238    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 31.91          | 142.25                    | 123.07                    | 21.0                 |
| 022B000006N-1, 15.0'-16.5' | 239    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 31.57          | 121.07                    | 103.11                    | 25.1                 |
| 022B000006N-1, 20.0'-21.5' | 240    | 2/6/19      | Dist          | No. 4                 |                          |      | Yes                   | 283.81         | 528.26                    | 454.15                    | 43.5                 |
| 022B000006N-1, 30.0'-31.5' | 242    | 2/6/19      | Dist          | No. 4                 |                          |      | Yes                   | 307.61         | 702.92                    | 633.95                    | 21.1                 |
| 022B000006N-1, 35.0'-36.5' | 244    | 2/6/19      | Dist          | No. 4                 |                          |      | No                    | 31.56          | 85.96                     | 76.85                     | 20.1                 |
| 022B000006N-1, 40.0'-41.5' | 245    | 2/6/19      | Dist          | No. 4                 |                          |      | No                    | 32.09          | 97.42                     | 85.29                     | 22.8                 |
| 022B000006N-1, 45.0'-46.5' | 246    | 2/6/19      | Dist          | No. 4                 |                          |      | Yes                   | 30.67          | 179.13                    | 154.11                    | 20.3                 |
| 022B000006N-1, 50.51.5'    | 247    | 2/6/19      | Dist          | 1/2"                  |                          |      | No                    | 303.47         | 586.19                    | 534.23                    | 22.5                 |
| 022B000006N-2, 2.0'-3.5'   | 248    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 290.91         | 595.94                    | 556.21                    | 15.0                 |
| 022B000006N-2, 5.0'-6.5'   | 250    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 30.39          | 93.07                     | 84.71                     | 15.4                 |
| 022B000006N-2, 10.0'-11.5' | 251    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 31.63          | 112.82                    | 98.05                     | 22.2                 |
| 022B000006N-2, 15.0'-16.5' | 252    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 304.53         | 547.48                    | 495.55                    | 27.2                 |
| 022B000006N-2, 20.0'-21.5' | 253    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 309.63         | 605.29                    | 529.72                    | 34.3                 |
| 022B000006N-2, 25.0'-26.5' | 255    | 2/6/19      | Dist          | No. 4                 |                          |      | No                    | 31.60          | 82.74                     | 72.08                     | 26.3                 |
| 022B000006N-2, 28.0'-29.0' | 256    | 2/6/19      | Dist          | 1"                    |                          |      | No                    | 30.20          | 58.80                     | 54.05                     | 19.9                 |

Comments

Reviewed By RJ



**Slake Durability Index**  
KM 64 - 513

Project Name Bridging KY

Project Number 178568003

| Lab ID | Source        | Depth       | Material Description | Fragment Description | Testing Dates           | Initial Dry Wt. (g) | Final Dry Wt. (g) | SDI (%) | Jar Slake |
|--------|---------------|-------------|----------------------|----------------------|-------------------------|---------------------|-------------------|---------|-----------|
| 269    | 022B000006N-1 | 30.0'-36.0' | Shale, gray          | Type II              | 02/06/2019 - 02/08/2019 | 454.31              | 298.73            | 65.8    | 4         |

MATERIAL SUMMARY

CONTRACT ID: 211016

121GR21D016-STP BRO

BR02200011900

KY 1 ADDRESS DEFICIENCIES OF KY 1 BRIDGE OVER POWELL BRANCH 022B00006N. CULVERT REPLACEMENT, A DISTANCE OF .12 MILES.

| Project Line No | Bid Code | DESCRIPTION                                                      | Quantity  | Unit |
|-----------------|----------|------------------------------------------------------------------|-----------|------|
| 0005            | 00001    | DGA BASE                                                         | 2,725.00  | TON  |
| 0010            | 00071    | CRUSHED AGGREGATE SIZE NO 57 - FOR BACKFILL OF CONTAMINATED SOIL | 1,400.00  | TON  |
| 0015            | 00100    | ASPHALT SEAL AGGREGATE                                           | 20.00     | TON  |
| 0020            | 00103    | ASPHALT SEAL COAT                                                | 2.40      | TON  |
| 0025            | 00212    | CL2 ASPH BASE 1.00D PG64-22                                      | 2,041.00  | TON  |
| 0030            | 00301    | CL2 ASPH SURF 0.38D PG64-22                                      | 462.00    | TON  |
| 0035            | 01982    | DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE                  | 24.00     | EACH |
| 0040            | 02223    | GRANULAR EMBANKMENT                                              | 721.00    | CUYD |
| 0045            | 02351    | GUARDRAIL-STEEL W BEAM-S FACE                                    | 162.50    | LF   |
| 0050            | 02360    | GUARDRAIL TERMINAL SECTION NO 1                                  | 1.00      | EACH |
| 0055            | 02371    | GUARDRAIL END TREATMENT TYPE 7                                   | 1.00      | EACH |
| 0060            | 02397    | TEMP GUARDRAIL                                                   | 985.00    | LF   |
| 0065            | 02483    | CHANNEL LINING CLASS II                                          | 99.00     | TON  |
| 0070            | 02545    | CLEARING AND GRUBBING - Less than 1 acre CARTER                  | 1.00      | LS   |
| 0075            | 02585    | EDGE KEY                                                         | 97.00     | LF   |
| 0080            | 02650    | MAINTAIN & CONTROL TRAFFIC - CARTER                              | 1.00      | LS   |
| 0085            | 02651    | DIVERSIONS (BY-PASS DETOURS) - CARTER                            | 1.00      | LS   |
| 0090            | 02671    | PORTABLE CHANGEABLE MESSAGE SIGN                                 | 4.00      | EACH |
| 0095            | 02726    | STAKING - CARTER                                                 | 1.00      | LS   |
| 0100            | 02731    | REMOVE STRUCTURE - CARTER                                        | 1.00      | LS   |
| 0105            | 03171    | CONCRETE BARRIER WALL TYPE 9T                                    | 160.00    | LF   |
| 0110            | 04939    | REMOVE POLE                                                      | 2.00      | EACH |
| 0115            | 06407    | SBM ALUM SHEET SIGNS .125 IN                                     | 53.00     | SQFT |
| 0120            | 06410    | STEEL POST TYPE 1                                                | 96.00     | LF   |
| 0125            | 06514    | PAVE STRIPING-PERM PAINT-4 IN                                    | 2,420.00  | LF   |
| 0130            | 06568    | PAVE MARKING-THERMO STOP BAR-24IN                                | 90.00     | LF   |
| 0135            | 08003    | FOUNDATION PREPARATION - CARTER                                  | 1.00      | LS   |
| 0140            | 08100    | CONCRETE-CLASS A                                                 | 253.70    | CUYD |
| 0145            | 08150    | STEEL REINFORCEMENT                                              | 29,300.00 | LB   |
| 0150            | 21289ED  | LONGITUDINAL EDGE KEY                                            | 1,190.00  | LF   |
| 0155            | 21415ND  | EROSION CONTROL - CARTER                                         | 1.00      | LS   |
| 0160            | 21476ED  | SNOW FENCE                                                       | 2,100.00  | LF   |
| 0165            | 02569    | DEMOBILIZATION                                                   | 1.00      | LS   |

CONTRACT ID: 211016

121GR21D016-STP BRO

DE03500322116

ELIZAVILLE ROAD(KY-32) ADDRESS DEFICIENCIES OF BRIDGE ON KY-32 OVER MUD LICK CREEK 0.2 MILES WEST OF CRAINTOWN ROAD(CR-1302) GRADE, DRAIN & SURFACE WITH BRIDGE, A DISTANCE OF .29 MILES.

MATERIAL SUMMARY

| Project Line No | Bid Code | DESCRIPTION                                   | Quantity  | Unit |
|-----------------|----------|-----------------------------------------------|-----------|------|
| 0170            | 00003    | CRUSHED STONE BASE                            | 3,811.00  | TON  |
| 0175            | 00020    | TRAFFIC BOUND BASE                            | 36.00     | TON  |
| 0180            | 00100    | ASPHALT SEAL AGGREGATE                        | 14.00     | TON  |
| 0185            | 00103    | ASPHALT SEAL COAT                             | 2.00      | TON  |
| 0190            | 00190    | LEVELING & WEDGING PG64-22                    | 236.00    | TON  |
| 0195            | 00212    | CL2 ASPH BASE 1.00D PG64-22                   | 1,213.00  | TON  |
| 0200            | 00301    | CL2 ASPH SURF 0.38D PG64-22                   | 445.00    | TON  |
| 0205            | 00356    | ASPHALT MATERIAL FOR TACK                     | 5.00      | TON  |
| 0210            | 00078    | CRUSHED AGGREGATE SIZE NO 2                   | 2.00      | TON  |
| 0215            | 00440    | ENTRANCE PIPE-15 IN                           | 96.00     | LF   |
| 0220            | 00443    | ENTRANCE PIPE-24 IN                           | 50.00     | LF   |
| 0225            | 01000    | PERFORATED PIPE-4 IN                          | 40.00     | LF   |
| 0230            | 01010    | NON-PERFORATED PIPE-4 IN                      | 16.00     | LF   |
| 0235            | 01020    | PERF PIPE HEADWALL TY 1-4 IN                  | 2.00      | EACH |
| 0240            | 01987    | DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE | 34.00     | EACH |
| 0245            | 02014    | BARRICADE-TYPE III                            | 4.00      | EACH |
| 0250            | 02159    | TEMP DITCH                                    | 775.00    | LF   |
| 0255            | 02160    | CLEAN TEMP DITCH                              | 388.00    | LF   |
| 0260            | 02203    | STRUCTURE EXCAV-UNCLASSIFIED                  | 34.00     | CUYD |
| 0265            | 02230    | EMBANKMENT IN PLACE                           | 4,171.00  | CUYD |
| 0270            | 02242    | WATER                                         | 200.00    | MGAL |
| 0275            | 02351    | GUARDRAIL-STEEL W BEAM-S FACE                 | 1,237.50  | LF   |
| 0280            | 02360    | GUARDRAIL TERMINAL SECTION NO 1               | 2.00      | EACH |
| 0285            | 02371    | GUARDRAIL END TREATMENT TYPE 7                | 1.00      | EACH |
| 0290            | 02381    | REMOVE GUARDRAIL                              | 1,289.00  | LF   |
| 0295            | 02391    | GUARDRAIL END TREATMENT TYPE 4A               | 2.00      | EACH |
| 0300            | 02429    | RIGHT-OF-WAY MONUMENT TYPE 1                  | 14.00     | EACH |
| 0305            | 02432    | WITNESS POST                                  | 8.00      | EACH |
| 0310            | 02483    | CHANNEL LINING CLASS II                       | 63.00     | TON  |
| 0315            | 02484    | CHANNEL LINING CLASS III                      | 381.00    | TON  |
| 0320            | 02545    | CLEARING AND GRUBBING - 4 ACRES FLEMING       | 1.00      | LS   |
| 0325            | 02555    | CONCRETE-CLASS B                              | 37.00     | CUYD |
| 0330            | 02562    | TEMPORARY SIGNS                               | 190.00    | SQFT |
| 0335            | 02585    | EDGE KEY                                      | 60.00     | LF   |
| 0340            | 02650    | MAINTAIN & CONTROL TRAFFIC - FLEMING          | 1.00      | LS   |
| 0345            | 02651    | DIVERSIONS (BY-PASS DETOURS) - FLEMING        | 1.00      | LS   |
| 0350            | 02690    | SAFEOLOADING                                  | 6.00      | CUYD |
| 0355            | 02701    | TEMP SILT FENCE                               | 775.00    | LF   |
| 0360            | 02703    | SILT TRAP TYPE A                              | 4.00      | EACH |
| 0365            | 02704    | SILT TRAP TYPE B                              | 4.00      | EACH |
| 0370            | 02705    | SILT TRAP TYPE C                              | 4.00      | EACH |
| 0375            | 02706    | CLEAN SILT TRAP TYPE A                        | 4.00      | EACH |
| 0380            | 02707    | CLEAN SILT TRAP TYPE B                        | 4.00      | EACH |
| 0385            | 02708    | CLEAN SILT TRAP TYPE C                        | 4.00      | EACH |
| 0390            | 02726    | STAKING - FLEMING                             | 1.00      | LS   |
| 0395            | 02731    | REMOVE STRUCTURE - FLEMING                    | 1.00      | LS   |
| 0400            | 05950    | EROSION CONTROL BLANKET                       | 2,471.00  | SQYD |
| 0405            | 05952    | TEMP MULCH                                    | 10,445.00 | SQYD |
| 0410            | 05953    | TEMP SEEDING AND PROTECTION                   | 7,795.00  | SQYD |
| 0415            | 05963    | INITIAL FERTILIZER                            | .30       | TON  |

MATERIAL SUMMARY

| Project Line No | Bid Code   | DESCRIPTION                         | Quantity  | Unit |
|-----------------|------------|-------------------------------------|-----------|------|
| 0420            | 05964      | MAINTENANCE FERTILIZER              | .50       | TON  |
| 0425            | 05985      | SEEDING AND PROTECTION              | 7,356.00  | SQYD |
| 0430            | 05992      | AGRICULTURAL LIMESTONE              | 9.10      | TON  |
| 0435            | 06510      | PAVE STRIPING-TEMP PAINT-4 IN       | 3,000.00  | LF   |
| 0440            | 06514      | PAVE STRIPING-PERM PAINT-4 IN       | 7,200.00  | LF   |
| 0445            | 06585      | PAVEMENT MARKER TY IVA-MW TEMP      | 60.00     | EACH |
| 0450            | 06588      | PAVEMENT MARKER TY IVA-BY TEMP      | 52.00     | EACH |
| 0455            | 20166ES810 | TEMPORARY PIPE - 24 IN              | 190.00    | LF   |
| 0460            | 20550ND    | SAWCUT PAVEMENT                     | 2,840.00  | LF   |
| 0465            | 21289ED    | LONGITUDINAL EDGE KEY               | 2,840.00  | LF   |
| 0470            | 03299      | ARMORED EDGE FOR CONCRETE           | 116.00    | LF   |
| 0475            | 08002      | STRUCTURE EXCAV-SOLID ROCK          | 22.10     | CUYD |
| 0480            | 08003      | FOUNDATION PREPARATION - FLEMING    | 1.00      | LS   |
| 0485            | 08100      | CONCRETE-CLASS A                    | 154.10    | CUYD |
| 0490            | 08150      | STEEL REINFORCEMENT                 | 5,908.00  | LB   |
| 0495            | 08151      | STEEL REINFORCEMENT-EPOXY COATED    | 11,989.00 | LB   |
| 0500            | 15011      | S DIRECTIONAL BORE                  | 490.00    | LF   |
| 0505            | 15021      | S ENCASEMENT STEEL OPEN CUT RANGE 2 | 220.00    | LF   |
| 0510            | 15051      | S FORCE MAIN PE/PLASTIC 04 INCH     | 570.00    | LF   |
| 0515            | 15059      | S FORCE MAIN PVC 04 INCH            | 3,830.00  | LF   |
| 0520            | 15073      | S FORCE MAIN TIE-IN 04 INCH         | 4.00      | EACH |
| 0525            | 15084      | S FORCE MAIN VALVE GATE             | 4.00      | EACH |
| 0530            | 15123      | S LINE MARKER                       | 12.00     | EACH |
| 0535            | 02569      | DEMOBILIZATION                      | 1.00      | LS   |

**Item 9-10002.00  
Carter County  
KY 1 over Powell Branch  
Culvert Replacement**

**Item 9-1084.00  
Fleming County  
KY 32 over Mud Lick Creek  
Culvert Replacement**

**SPECIAL NOTE FOR PRE-BID CONFERENCE**

The Department will conduct a **Mandatory** Pre-Bid Conference of the subject project on **Friday, April 9th, 2021 at 1:30 PM EDT** by either video conference call or in person at:

**Hitchins Volunteer Fire Department  
4115 KY-773  
Hitchins, KY 41146**

Any company that is interested in bidding on the subject project or being part of a joint venture must be represented at the conference. No individual can represent more than one company. At the video conference a roster will be taken of the representatives present. In addition, following the video conference each company shall submit a signed affidavit listing the company members attending the video conference. **Only companies represented in person or at the video conference and have submitted the affidavit by the due date will be eligible to have their bids opened at the date of letting.**

The purpose of the conference is to familiarize all prospective bidders with the contract requirements and the location and condition of all structures within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the projects.

Companies interesting in bidding on the subject project should contact Terry Ishmael at Terry.Ishmael@ky.gov before **4:30 p.m. Thursday, April 8th, 2021** to obtain a link to the video conference and a copy of the affidavit. **This link and affidavit must be requested through the Kentucky Transportation Cabinet using this contact ONLY to be eligible to bid.**

**PART II**

**SPECIFICATIONS AND STANDARD DRAWINGS**



### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020*.

## **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting.  
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

## **SPECIAL NOTE FOR TURF REINFORCING MAT**

**1.0 DESCRIPTION.** Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

### **2.0 MATERIALS.**

**2.1 Turf Reinforcement Mat (TRM).** Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.

- A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
- B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
- C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

### **2.2 Classifications**

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical

11F

structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

| Turf Reinforcement Matting                               |                     |                       |                     |                       |                                               |
|----------------------------------------------------------|---------------------|-----------------------|---------------------|-----------------------|-----------------------------------------------|
| Properties <sup>1</sup>                                  | Type 1              | Type 2                | Type 3              | Type 4                | Test Method                                   |
| Minimum tensile Strength lbs/ft                          | 125                 | 150                   | 175                 | 3000 by 1500          | ASTM D6818 <sup>2</sup>                       |
| UV stability (minimum % tensile retention)               | 80                  | 80                    | 80                  | 90                    | ASTM D4355 <sup>3</sup><br>(1000-hr exposure) |
| Minimum thickness (inches)                               | 0.25                | 0.25                  | 0.25                | 0.40                  | ASTM D6525                                    |
| Slopes applications                                      | 2H:1V<br>or flatter | 1.5H:1V<br>or flatter | 1H:1V or<br>flatter | 1 H: 1V or<br>greater |                                               |
| Shear stress lbs/ft <sup>2</sup><br>Channel applications | 6.0 <sup>4</sup>    | 8.0 <sup>4</sup>      | 10.0 <sup>4</sup>   | 12.0 <sup>4</sup>     | ASTM D6459<br>ASTM D6460-07                   |

<sup>1</sup> For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting alone.

<sup>2</sup>Minimum Average Roll Values for tensile strength of sample material machine direction.

<sup>3</sup>Tensile Strength percentage retained after stated 1000 hr duration of exposure under ASTM D4355 testing. Based on nondegradable components exclusively.

<sup>4</sup>Maximum permissible shear design values based on short-term (0.5 hr) vegetated data obtained by full scale flume testing ASTM D6459, D6460-07. Based on nondegradable components exclusively. Testing will be done at Independent Hydraulics Facility such as Colorado State University hydraulics laboratory, Utah State University hydraulics laboratory, Texas Transportation Institute (TTI) hydraulics and erosion control laboratory.

## 2.3 Quality Assurance Sampling, Testing, and Acceptance

- A) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- B) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- C) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

Current mats meeting the above criteria are shown on the Department’s List of Approved Materials.

**2.4 Fasteners.** When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer’s Representative. Provide staples with colored tops when requested by the Engineer.

**3.0 CONSTRUCTION.** When requested by the Engineer, provide a Manufacturer’s Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department’s criteria and the Manufacturer’s criteria, construct using the more restrictive. The Engineer and Manufacturer’s Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer’s recommendations and the following as minimum installation technique:

**3.1 Site Preparation.** Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.

**3.2 Installation.** Install mats according to Standard Drawing Sepias “Turf Mat Channel Installation” and “Turf Mat Slope Installation.” Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer’s Representative. The mat should be in direct contact with the soil surface.

**4.0 MEASUREMENT.** The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer’s Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.

**5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u>          | <u>Pay Unit</u> |
|-------------|--------------------------|-----------------|
| 23274EN11F  | Turf Reinforcement Mat 1 | Square Yard     |
| 23275EN11F  | Turf Reinforcement Mat 2 | Square Yard     |
| 23276EN11F  | Turf Reinforcement Mat 3 | Square Yard     |
| 23277EN11F  | Turf Reinforcement Mat 4 | Square Yard     |

June 15, 2012

## **PART III**

### **EMPLOYMENT, WAGE AND RECORD REQUIREMENTS**

FHWA-1273 -- Revised May 1, 2012

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are



applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

#### **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

#### **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

##### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.



i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the



department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

**EMPLOYMENT REQUIREMENTS  
RELATING TO  
NONDISCRIMINATION OF EMPLOYEES  
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)**

**AN ACT OF THE KENTUCKY GENERAL ASSEMBLY  
TO PREVENT DISCRIMINATION IN EMPLOYMENT**

**KRS CHAPTER 344  
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

### Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

### **Standard Title VI/Non-Discrimination Statutes and Authorities**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

## EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

"General Decision Number: KY20210038 03/05/2021

Superseded General Decision Number: KY20200038

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

| Modification Number | Publication Date |
|---------------------|------------------|
| 0                   | 01/01/2021       |
| 1                   | 03/05/2021       |

BRIN0004-003 06/01/2017

BRECKENRIDGE COUNTY

|                 | Rates    | Fringes |
|-----------------|----------|---------|
| BRICKLAYER..... | \$ 26.80 | 12.38   |
| -----           |          |         |

BRKY0001-005 06/01/2020

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE,



MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE  
COUNTIES:

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| BRICKLAYER.....         | \$ 31.00 | 14.86   |
| -----                   |          |         |
| BRKY0002-006 06/01/2020 |          |         |

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| BRICKLAYER.....         | \$ 31.00 | 14.86   |
| -----                   |          |         |
| BRKY0007-004 06/01/2017 |          |         |

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| BRICKLAYER.....         | \$ 32.98 | 19.02   |
| -----                   |          |         |
| BRKY0017-004 06/01/2020 |          |         |

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN,  
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| BRICKLAYER.....         | \$ 31.00 | 14.86   |
| -----                   |          |         |
| CARP0064-001 04/01/2020 |          |         |

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| CARPENTER.....          | \$ 29.81 | 19.96   |
| Diver.....              | \$ 45.09 | 19.96   |
| PILEDRIVERMAN.....      | \$ 30.06 | 19.96   |
| -----                   |          |         |
| ELEC0212-008 06/01/2020 |          |         |

BRACKEN, GALLATIN and GRANT COUNTIES

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| ELECTRICIAN.....        | \$ 31.30 | 19.72   |
| -----                   |          |         |
| ELEC0212-014 11/25/2019 |          |         |

BRACKEN, GALLATIN & GRANT COUNTIES:

|                                          | Rates    | Fringes |
|------------------------------------------|----------|---------|
| Sound & Communication<br>Technician..... | \$ 24.35 | 12.09   |
| -----                                    |          |         |
| ELEC0317-012 06/01/2020                  |          |         |

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

| Rates | Fringes |
|-------|---------|
|-------|---------|



|                            |          |       |
|----------------------------|----------|-------|
| ELECTRICIAN (Wiremen)..... | \$ 35.10 | 26.22 |
| -----                      |          |       |
| * ELEC0369-007 05/26/2020  |          |       |

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

|                         |          |         |
|-------------------------|----------|---------|
|                         | Rates    | Fringes |
| ELECTRICIAN.....        | \$ 33.21 | 17.85   |
| -----                   |          |         |
| ELEC0575-002 11/30/2020 |          |         |

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

|                         |          |         |
|-------------------------|----------|---------|
|                         | Rates    | Fringes |
| ELECTRICIAN.....        | \$ 33.75 | 19.22   |
| -----                   |          |         |
| ENGI0181-018 07/01/2020 |          |         |

|                          |          |         |
|--------------------------|----------|---------|
|                          | Rates    | Fringes |
| POWER EQUIPMENT OPERATOR |          |         |
| GROUP 1.....             | \$ 33.95 | 17.25   |
| GROUP 2.....             | \$ 31.09 | 17.25   |
| GROUP 3.....             | \$ 31.54 | 17.25   |
| GROUP 4.....             | \$ 30.77 | 17.25   |

OPERATING ENGINEER CLASSIFICATIONS

- GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment
- GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to

Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0044-009 06/01/2020

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,  
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);  
CARROLL (Eastern third, including the Township of Ghent);  
FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);  
NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);  
OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);  
SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

|                    | Rates    | Fringes |
|--------------------|----------|---------|
| IRONWORKER         |          |         |
| Fence Erector..... | \$ 28.95 | 21.20   |
| Structural.....    | \$ 30.47 | 21.20   |

IRON0070-006 06/01/2020

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN,  
GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON,  
MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER,  
TRIMBLE, WASHINGTON & WOODFORD  
BOURBON (Southern two-thirds, including Townships of Austerlity,  
Centerville, Clintonville, Elizabeth, Hutchison, Littlerock,  
North Middletown & Paris);  
CARROLL (Western two-thirds, including Townships of Carrollton,  
Easterday, English, Locust, Louis, Prestonville & Worthville);  
CLARK (Western two-thirds, including Townships of Becknerville,  
Flanagan, Ford, Pine Grove, Winchester & Wyandotte);  
OWEN (Eastern eighth, including Townships of Glenmary, Gratz,  
Monterey, Perry Park & Tacketts Mill);  
SCOTT (Southern third, including Townships of Georgetown, Great  
Crossing, Newtown, Stampling Ground & Woodlake);

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| IRONWORKER.....         | \$ 30.42 | 23.15   |
| -----                   |          |         |
| IRON0769-007 06/01/2020 |          |         |

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN  
CLARK (Eastern third, including townships of Bloomingdale,  
Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson);  
FLEMING (Townships of Beechburg, Colfax, Elizaville,  
Flemingsburg, Flemingsburg Junction, Foxport, Grange City,  
Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton,  
Pecksrige, Plummrs Landing, Plummrs Mill, Poplar Plains,  
Ringos Mills, Tilton & Wallingford);  
MASON (Eastern third, including Townships of Helena, Marshall,  
Orangeburg, Plumville & Springdale);  
NICHOLAS (Eastern eighth, including the Township of Moorefield  
Sprout)

|             | Rates    | Fringes |
|-------------|----------|---------|
| IRONWORKER  |          |         |
| ZONE 1..... | \$ 32.75 | 26.34   |
| ZONE 2..... | \$ 33.15 | 26.34   |
| ZONE 3..... | \$ 34.75 | 26.34   |

ZONE 1 - (no base rate increase) Up to 10 mile radius of  
Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 2 - (add \$0.40 per hour to base rate) 10 to 50 mile  
radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 3 - (add \$2.00 per hour to base rate) 50 mile radius &  
over of Union Hall, 1643 Greenup Ave, Ashland, KY.

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LAB00189-003 07/01/2020

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT,  
FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON,  
JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS,  
OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

| Rates | Fringes |
|-------|---------|
|-------|---------|

Laborers:

|              |          |       |
|--------------|----------|-------|
| GROUP 1..... | \$ 23.26 | 15.62 |
| GROUP 2..... | \$ 23.56 | 15.62 |
| GROUP 3..... | \$ 23.51 | 15.62 |
| GROUP 4..... | \$ 24.16 | 15.62 |

LABORERS CLASSIFICATIONS

- GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup
- GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller
- GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster
- GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2020

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

|              |          |         |
|--------------|----------|---------|
|              | Rates    | Fringes |
| Laborers:    |          |         |
| GROUP 1..... | \$ 23.26 | 15.62   |
| GROUP 2..... | \$ 23.51 | 15.62   |
| GROUP 3..... | \$ 23.56 | 15.62   |
| GROUP 4..... | \$ 24.16 | 15.62   |

LABORERS CLASSIFICATIONS

- GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement

Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LAB00189-009 07/01/2020

BRECKINRIDGE & GRAYSON COUNTIES

|              | Rates    | Fringes |
|--------------|----------|---------|
| Laborers:    |          |         |
| GROUP 1..... | \$ 23.26 | 15.62   |
| GROUP 2..... | \$ 23.51 | 15.62   |
| GROUP 3..... | \$ 23.56 | 15.62   |
| GROUP 4..... | \$ 24.16 | 15.62   |

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);

Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;  
Burner & Welder; Bushhammer; Chain Saw Operator; Concrete  
Saw Operator; Deckhand Scow Man; Dry Cement Handler;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Level C; Forklift Operator for Masonary; Form Setter;  
Green Concrete Cutting; Hand Operated Grouter & Grinder  
Machine Operator; Jackhammer; Pavement Breaker; Paving  
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven  
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;  
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind  
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;  
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman;  
Gunnite Operator & Mixer; Grout Pump Operator; Side Rail  
Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free  
Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster;  
& Tunnel Mucker (Free Air); Directional & Horizontal  
Boring; Air Track Drillers (All Types); Powdermen &  
Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN,  
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
ROBERTSON, SCOTT & WOODFORD COUNTIES:

|                                                                      | Rates    | Fringes |
|----------------------------------------------------------------------|----------|---------|
| PAINTER                                                              |          |         |
| Bridge/Equipment Tender<br>and/or Containment Builder..              | \$ 18.90 | 5.90    |
| Brush & Roller.....                                                  | \$ 21.30 | 5.90    |
| Elevated Tanks;<br>Steeplejack Work; Bridge &<br>Lead Abatement..... | \$ 22.30 | 5.90    |
| Sandblasting &<br>Waterblasting.....                                 | \$ 22.05 | 5.90    |
| Spray.....                                                           | \$ 21.80 | 5.90    |

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PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

|                                                                              | Rates    | Fringes |
|------------------------------------------------------------------------------|----------|---------|
| PAINTER (Heavy & Highway<br>Bridges - Guardrails -<br>Lightpoles - Striping) |          |         |
| Bridge Equipment Tender<br>and Containment Builder.....                      | \$ 20.73 | 9.06    |
| Brush & Roller.....                                                          | \$ 23.39 | 9.06    |
| Elevated Tanks;<br>Steeplejack Work; Bridge &<br>Lead Abatement.....         | \$ 24.39 | 9.06    |
| Sandblasting & Water<br>Blasting.....                                        | \$ 24.14 | 9.06    |
| Spray.....                                                                   | \$ 23.89 | 9.06    |



PAIN0118-004 06/01/2018

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN,  
HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY,  
SPENCER, TRIMBLE & WASHINGTON COUNTIES:

|                                                                       | Rates    | Fringes |
|-----------------------------------------------------------------------|----------|---------|
| PAINTER                                                               |          |         |
| Brush & Roller.....                                                   | \$ 22.00 | 12.52   |
| Spray, Sandblast, Power<br>Tools, Waterblast & Steam<br>Cleaning..... | \$ 23.00 | 12.52   |

PAIN1072-003 12/01/2018

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

|                                                                         | Rates    | Fringes |
|-------------------------------------------------------------------------|----------|---------|
| Painters:                                                               |          |         |
| Bridges; Locks; Dams;<br>Tension Towers & Energized<br>Substations..... | \$ 33.33 | 18.50   |
| Power Generating Facilities.                                            | \$ 30.09 | 18.50   |

PLUM0248-003 06/01/2020

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

|                              | Rates    | Fringes |
|------------------------------|----------|---------|
| Plumber and Steamfitter..... | \$ 37.05 | 21.48   |

PLUM0392-007 06/01/2018

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN &  
ROBERTSON COUNTIES:

|                               | Rates    | Fringes |
|-------------------------------|----------|---------|
| Plumbers and Pipefitters..... | \$ 32.01 | 19.67   |

PLUM0502-003 08/01/2020

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN  
(Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON,  
LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &  
WASHINGTON COUNTIES

|              | Rates    | Fringes |
|--------------|----------|---------|
| PLUMBER..... | \$ 36.92 | 20.78   |

SUKY2010-160 10/08/2001

|                | Rates    | Fringes |
|----------------|----------|---------|
| Truck drivers: |          |         |
| GROUP 1.....   | \$ 16.57 | 7.34    |
| GROUP 2.....   | \$ 16.68 | 7.34    |
| GROUP 3.....   | \$ 16.86 | 7.34    |

GROUP 4.....\$ 16.96

7.34

## TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

## Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or



""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on

- a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

**TO: EMPLOYERS/EMPLOYEES**

**PREVAILING WAGE SCHEDULE:**

**The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.**

**OVERTIME:**

**Overtime is to be paid to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.**

Director  
Division of Construction Procurement  
Frankfort, Kentucky 40622  
502-564-3500

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

| <b>GOALS FOR MINORITY<br/>PARTICIPATION<br/>IN EACH TRADE</b> | <b>GOALS FOR FEMALE<br/>PARTICIPATION IN<br/>EACH TRADE</b> |
|---------------------------------------------------------------|-------------------------------------------------------------|
| 2.5%                                                          | 6.9%                                                        |

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director  
Office of Federal Contract Compliance Programs  
61 Forsyth Street, SW, Suite 7B75  
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Carter County.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

| <b>GOALS FOR MINORITY<br/>PARTICIPATION<br/>IN EACH TRADE</b> | <b>GOALS FOR FEMALE<br/>PARTICIPATION IN<br/>EACH TRADE</b> |
|---------------------------------------------------------------|-------------------------------------------------------------|
| 9.2%                                                          | 6.9%                                                        |

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director  
Office of Federal Contract Compliance Programs  
61 Forsyth Street, SW, Suite 7B75  
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Fleming County.

## **PART IV**

## **INSURANCE**

Refer to  
*Kentucky Standard Specifications for Road and Bridge Construction,*  
current edition

**PART V**

**BID ITEMS**

Report Date 3/30/21

Section: 0001 - PAVING

| LINE | BID CODE | ALT | DESCRIPTION                 | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-----------------------------|----------|------|-----------|----|--------|
| 0010 | 00003    |     | CRUSHED STONE BASE          | 3,811.00 | TON  |           | \$ |        |
| 0020 | 00020    |     | TRAFFIC BOUND BASE          | 36.00    | TON  |           | \$ |        |
| 0030 | 00100    |     | ASPHALT SEAL AGGREGATE      | 14.00    | TON  |           | \$ |        |
| 0040 | 00103    |     | ASPHALT SEAL COAT           | 2.00     | TON  |           | \$ |        |
| 0050 | 00190    |     | LEVELING & WEDGING PG64-22  | 236.00   | TON  |           | \$ |        |
| 0060 | 00212    |     | CL2 ASPH BASE 1.00D PG64-22 | 1,213.00 | TON  |           | \$ |        |
| 0070 | 00301    |     | CL2 ASPH SURF 0.38D PG64-22 | 445.00   | TON  |           | \$ |        |
| 0080 | 00356    |     | ASPHALT MATERIAL FOR TACK   | 5.00     | TON  |           | \$ |        |

Section: 0002 - ROADWAY

| LINE | BID CODE | ALT | DESCRIPTION                                      | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--------------------------------------------------|----------|------|-----------|----|--------|
| 0090 | 00078    |     | CRUSHED AGGREGATE SIZE NO 2                      | 2.00     | TON  |           | \$ |        |
| 0100 | 00440    |     | ENTRANCE PIPE-15 IN                              | 96.00    | LF   |           | \$ |        |
| 0110 | 00443    |     | ENTRANCE PIPE-24 IN                              | 50.00    | LF   |           | \$ |        |
| 0120 | 01000    |     | PERFORATED PIPE-4 IN                             | 40.00    | LF   |           | \$ |        |
| 0130 | 01010    |     | NON-PERFORATED PIPE-4 IN                         | 16.00    | LF   |           | \$ |        |
| 0140 | 01020    |     | PERF PIPE HEADWALL TY 1-4 IN                     | 2.00     | EACH |           | \$ |        |
| 0150 | 01987    |     | DELINEATOR FOR GUARDRAIL BI<br>DIRECTIONAL WHITE | 34.00    | EACH |           | \$ |        |
| 0160 | 02014    |     | BARRICADE-TYPE III                               | 4.00     | EACH |           | \$ |        |
| 0170 | 02159    |     | TEMP DITCH                                       | 775.00   | LF   |           | \$ |        |
| 0180 | 02160    |     | CLEAN TEMP DITCH                                 | 388.00   | LF   |           | \$ |        |
| 0190 | 02203    |     | STRUCTURE EXCAV-UNCLASSIFIED                     | 34.00    | CUYD |           | \$ |        |
| 0200 | 02230    |     | EMBANKMENT IN PLACE                              | 4,171.00 | CUYD |           | \$ |        |
| 0210 | 02242    |     | WATER                                            | 200.00   | MGAL |           | \$ |        |
| 0220 | 02351    |     | GUARDRAIL-STEEL W BEAM-S FACE                    | 1,237.50 | LF   |           | \$ |        |
| 0230 | 02360    |     | GUARDRAIL TERMINAL SECTION NO 1                  | 2.00     | EACH |           | \$ |        |
| 0240 | 02371    |     | GUARDRAIL END TREATMENT TYPE 7                   | 1.00     | EACH |           | \$ |        |
| 0250 | 02381    |     | REMOVE GUARDRAIL                                 | 1,289.00 | LF   |           | \$ |        |
| 0260 | 02391    |     | GUARDRAIL END TREATMENT TYPE 4A                  | 2.00     | EACH |           | \$ |        |
| 0270 | 02429    |     | RIGHT-OF-WAY MONUMENT TYPE 1                     | 14.00    | EACH |           | \$ |        |
| 0280 | 02432    |     | WITNESS POST                                     | 8.00     | EACH |           | \$ |        |
| 0290 | 02483    |     | CHANNEL LINING CLASS II                          | 63.00    | TON  |           | \$ |        |
| 0300 | 02484    |     | CHANNEL LINING CLASS III                         | 381.00   | TON  |           | \$ |        |
| 0310 | 02545    |     | CLEARING AND GRUBBING<br>4 ACRES FLEMING         | 1.00     | LS   |           | \$ |        |
| 0320 | 02555    |     | CONCRETE-CLASS B                                 | 37.00    | CUYD |           | \$ |        |
| 0330 | 02562    |     | TEMPORARY SIGNS                                  | 190.00   | SQFT |           | \$ |        |
| 0340 | 02585    |     | EDGE KEY                                         | 60.00    | LF   |           | \$ |        |
| 0350 | 02650    |     | MAINTAIN & CONTROL TRAFFIC<br>FLEMING            | 1.00     | LS   |           | \$ |        |
| 0360 | 02651    |     | DIVERSIONS (BY-PASS DETOURS)<br>FLEMING          | 1.00     | LS   |           | \$ |        |
| 0370 | 02690    |     | SAFELOADING                                      | 6.00     | CUYD |           | \$ |        |
| 0380 | 02701    |     | TEMP SILT FENCE                                  | 775.00   | LF   |           | \$ |        |
| 0390 | 02703    |     | SILT TRAP TYPE A                                 | 4.00     | EACH |           | \$ |        |



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| LINE | BID CODE   | ALT | DESCRIPTION                    | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT |
|------|------------|-----|--------------------------------|-----------|------|-----------|----|--------|
| 0400 | 02704      |     | SILT TRAP TYPE B               | 4.00      | EACH |           | \$ |        |
| 0410 | 02705      |     | SILT TRAP TYPE C               | 4.00      | EACH |           | \$ |        |
| 0420 | 02706      |     | CLEAN SILT TRAP TYPE A         | 4.00      | EACH |           | \$ |        |
| 0430 | 02707      |     | CLEAN SILT TRAP TYPE B         | 4.00      | EACH |           | \$ |        |
| 0440 | 02708      |     | CLEAN SILT TRAP TYPE C         | 4.00      | EACH |           | \$ |        |
| 0450 | 02726      |     | STAKING<br>FLEMING             | 1.00      | LS   |           | \$ |        |
| 0460 | 02731      |     | REMOVE STRUCTURE<br>FLEMING    | 1.00      | LS   |           | \$ |        |
| 0470 | 05950      |     | EROSION CONTROL BLANKET        | 2,471.00  | SQYD |           | \$ |        |
| 0480 | 05952      |     | TEMP MULCH                     | 10,445.00 | SQYD |           | \$ |        |
| 0490 | 05953      |     | TEMP SEEDING AND PROTECTION    | 7,795.00  | SQYD |           | \$ |        |
| 0500 | 05963      |     | INITIAL FERTILIZER             | .30       | TON  |           | \$ |        |
| 0510 | 05964      |     | MAINTENANCE FERTILIZER         | .50       | TON  |           | \$ |        |
| 0520 | 05985      |     | SEEDING AND PROTECTION         | 7,356.00  | SQYD |           | \$ |        |
| 0530 | 05992      |     | AGRICULTURAL LIMESTONE         | 9.10      | TON  |           | \$ |        |
| 0540 | 06510      |     | PAVE STRIPING-TEMP PAINT-4 IN  | 3,000.00  | LF   |           | \$ |        |
| 0550 | 06514      |     | PAVE STRIPING-PERM PAINT-4 IN  | 7,200.00  | LF   |           | \$ |        |
| 0560 | 06585      |     | PAVEMENT MARKER TY IVA-MW TEMP | 60.00     | EACH |           | \$ |        |
| 0570 | 06588      |     | PAVEMENT MARKER TY IVA-BY TEMP | 52.00     | EACH |           | \$ |        |
| 0580 | 20166ES810 |     | TEMPORARY PIPE<br>24 IN        | 190.00    | LF   |           | \$ |        |
| 0590 | 20550ND    |     | SAWCUT PAVEMENT                | 2,840.00  | LF   |           | \$ |        |
| 0600 | 21289ED    |     | LONGITUDINAL EDGE KEY          | 2,840.00  | LF   |           | \$ |        |

Section: 0003 - BRIDGE - 022B00006N

| LINE | BID CODE | ALT | DESCRIPTION                                                       | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-------------------------------------------------------------------|----------|------|-----------|----|--------|
| 0610 | 00001    |     | DGA BASE                                                          | 2,725.00 | TON  |           | \$ |        |
| 0620 | 00071    |     | CRUSHED AGGREGATE SIZE NO 57<br>FOR BACKFILL OF CONTAMINATED SOIL | 1,400.00 | TON  |           | \$ |        |
| 0630 | 00100    |     | ASPHALT SEAL AGGREGATE                                            | 20.00    | TON  |           | \$ |        |
| 0640 | 00103    |     | ASPHALT SEAL COAT                                                 | 2.40     | TON  |           | \$ |        |
| 0650 | 00212    |     | CL2 ASPH BASE 1.00D PG64-22                                       | 2,041.00 | TON  |           | \$ |        |
| 0660 | 00301    |     | CL2 ASPH SURF 0.38D PG64-22                                       | 462.00   | TON  |           | \$ |        |
| 0670 | 01982    |     | DELINEATOR FOR GUARDRAIL MONO<br>DIRECTIONAL WHITE                | 24.00    | EACH |           | \$ |        |
| 0680 | 02223    |     | GRANULAR EMBANKMENT                                               | 721.00   | CUYD |           | \$ |        |
| 0690 | 02351    |     | GUARDRAIL-STEEL W BEAM-S FACE                                     | 162.50   | LF   |           | \$ |        |
| 0700 | 02360    |     | GUARDRAIL TERMINAL SECTION NO 1                                   | 1.00     | EACH |           | \$ |        |
| 0710 | 02371    |     | GUARDRAIL END TREATMENT TYPE 7                                    | 1.00     | EACH |           | \$ |        |
| 0720 | 02397    |     | TEMP GUARDRAIL                                                    | 985.00   | LF   |           | \$ |        |
| 0730 | 02483    |     | CHANNEL LINING CLASS II                                           | 99.00    | TON  |           | \$ |        |
| 0740 | 02545    |     | CLEARING AND GRUBBING<br>Less than 1 acre CARTER                  | 1.00     | LS   |           | \$ |        |
| 0750 | 02585    |     | EDGE KEY                                                          | 97.00    | LF   |           | \$ |        |
| 0760 | 02650    |     | MAINTAIN & CONTROL TRAFFIC<br>CARTER                              | 1.00     | LS   |           | \$ |        |
| 0770 | 02651    |     | DIVERSIONS (BY-PASS DETOURS)<br>CARTER                            | 1.00     | LS   |           | \$ |        |

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| LINE | BID CODE | ALT | DESCRIPTION                       | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-----------------------------------|-----------|------|-----------|----|--------|
| 0780 | 02671    |     | PORTABLE CHANGEABLE MESSAGE SIGN  | 4.00      | EACH |           | \$ |        |
| 0790 | 02726    |     | STAKING<br>CARTER                 | 1.00      | LS   |           | \$ |        |
| 0800 | 02731    |     | REMOVE STRUCTURE<br>CARTER        | 1.00      | LS   |           | \$ |        |
| 0810 | 03171    |     | CONCRETE BARRIER WALL TYPE 9T     | 160.00    | LF   |           | \$ |        |
| 0820 | 04939    |     | REMOVE POLE                       | 2.00      | EACH |           | \$ |        |
| 0830 | 06407    |     | SBM ALUM SHEET SIGNS .125 IN      | 53.00     | SQFT |           | \$ |        |
| 0840 | 06410    |     | STEEL POST TYPE 1                 | 96.00     | LF   |           | \$ |        |
| 0850 | 06514    |     | PAVE STRIPING-PERM PAINT-4 IN     | 2,420.00  | LF   |           | \$ |        |
| 0860 | 06568    |     | PAVE MARKING-THERMO STOP BAR-24IN | 90.00     | LF   |           | \$ |        |
| 0870 | 08003    |     | FOUNDATION PREPARATION<br>CARTER  | 1.00      | LS   |           | \$ |        |
| 0880 | 08100    |     | CONCRETE-CLASS A                  | 253.70    | CUYD |           | \$ |        |
| 0890 | 08150    |     | STEEL REINFORCEMENT               | 29,300.00 | LB   |           | \$ |        |
| 0900 | 21289ED  |     | LONGITUDINAL EDGE KEY             | 1,190.00  | LF   |           | \$ |        |
| 0910 | 21415ND  |     | EROSION CONTROL<br>CARTER         | 1.00      | LS   |           | \$ |        |
| 0920 | 21476ED  |     | SNOW FENCE                        | 2,100.00  | LF   |           | \$ |        |

Section: 0004 - BRIDGE

| LINE | BID CODE | ALT | DESCRIPTION                       | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-----------------------------------|-----------|------|-----------|----|--------|
| 0930 | 03299    |     | ARMORED EDGE FOR CONCRETE         | 116.00    | LF   |           | \$ |        |
| 0940 | 08002    |     | STRUCTURE EXCAV-SOLID ROCK        | 22.10     | CUYD |           | \$ |        |
| 0950 | 08003    |     | FOUNDATION PREPARATION<br>FLEMING | 1.00      | LS   |           | \$ |        |
| 0960 | 08100    |     | CONCRETE-CLASS A                  | 154.10    | CUYD |           | \$ |        |
| 0970 | 08150    |     | STEEL REINFORCEMENT               | 5,908.00  | LB   |           | \$ |        |
| 0980 | 08151    |     | STEEL REINFORCEMENT-EPOXY COATED  | 11,989.00 | LB   |           | \$ |        |

Section: 0005 - SEWER

| LINE | BID CODE | ALT | DESCRIPTION                         | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-------------------------------------|----------|------|-----------|----|--------|
| 0990 | 15011    |     | S DIRECTIONAL BORE                  | 490.00   | LF   |           | \$ |        |
| 1000 | 15021    |     | S ENCASEMENT STEEL OPEN CUT RANGE 2 | 220.00   | LF   |           | \$ |        |
| 1010 | 15051    |     | S FORCE MAIN PE/PLASTIC 04 INCH     | 570.00   | LF   |           | \$ |        |
| 1020 | 15059    |     | S FORCE MAIN PVC 04 INCH            | 3,830.00 | LF   |           | \$ |        |
| 1030 | 15073    |     | S FORCE MAIN TIE-IN 04 INCH         | 4.00     | EACH |           | \$ |        |
| 1040 | 15084    |     | S FORCE MAIN VALVE GATE             | 4.00     | EACH |           | \$ |        |
| 1050 | 15123    |     | S LINE MARKER                       | 12.00    | EACH |           | \$ |        |

Section: 0006 - DEMOBILIZATION &/OR MOBILIZATION

| LINE | BID CODE | ALT | DESCRIPTION    | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|-----------|----|--------|
| 1060 | 02569    |     | DEMOBILIZATION | 1.00     | LS   |           | \$ |        |